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BIRD - NOTES.

THE JOURNAL OF THE FOREIGN BIRD CLUB,
FOR THE STUDY OF ALL SPECIES OF BIRDS
IN FREEDOM AND CAPTIVITY.

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VOLUME V.—NEW SERIES.

"By mutual confidence and mutual aid,
Great deeds are done and great discoveries made."

EDITED BY

WESLEY T. PAGE, F.Z.S., M.B.N.H.S.,
AUTHOR OF "AVIARIES AND AVIARY LIFE," ETC.

ASHBOURNE:
J. H. HENSTOCK, THE "AVIAN PRESS," MARKET PLACE.
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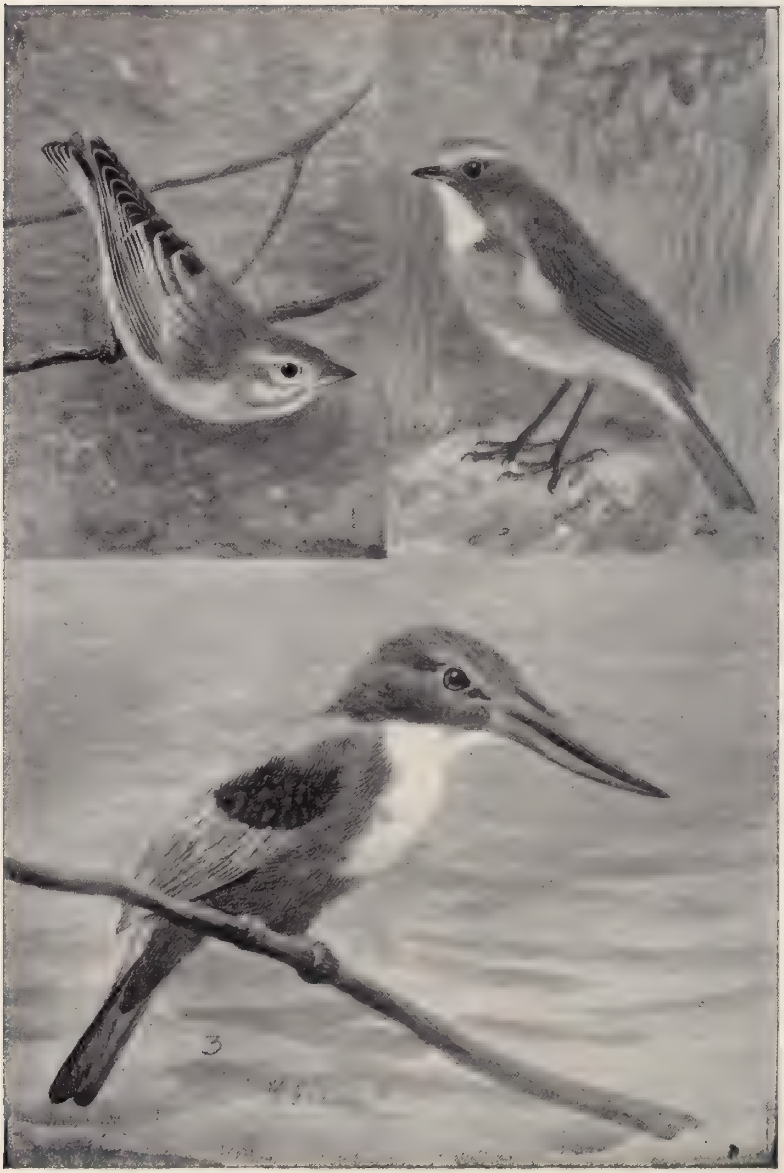
Errata.

Page 14, line 3 from bottom, for "*Phologolthraupis*" read *Phlogolthraupis.*
,, 45, line 6 from top, for "*maco*" read *macao.*
,, 92, line 18 from bottom, for "*leucoryphus*" read *leucocoryphus.*
,, 138, line 18 from top, for "*Sulampis*" read *Eulampis.*
,, 146, line 23 from top, for "*Plocepasser*" read *Ploceipasser.*
,, 195, in title, for "*Depranoplectes*" read *Drepanoplectes,* also on page 266, line 17.
,, 250, lines 12 and 25 from top, for "*nigricollis,*" read *nigrigenis.*
,, 276, line 4 from bottom, for "*gymnopthalma,*" read *gymnophthalma.*
,, 320, line 15 from top, for "*peopuiquius,*" read *propinquus.*
,, 344, line 18 from top, for "*Syphertis,*" read *Sypheotis.*
,, 346, line 10 from bottom, for "*novae-guinea,*" read *Pitta novaeguineae.*
,, 381, line 8 from top, for "*Butastin*" read *Butastur.*



Avian Press Process.

1. Sikhim Siskin.
2. Red-flanked Bush Robin.
3. White-breasted Kingfisher.

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January, 1914.

BIRD NOTES:

— THE —

JOURNAL OF THE FOREIGN BIRD CLUB

The L.C.B.A. Show.

By Wesley T. Page, F.Z.S., Etc.

(*Continued from page* 384, *Vol. IV.*)

I am not following classification sequence in these notes, as in this portion, the birds figured on our frontispiece must have the precedence.

Red-flanked Bush-Robin (*Ianthia rufilata*): Jerdon in the "Birds of India" tersely sums up the genus *Ianthia* as consisting of birds, the males of which are blue above and more or less rufous beneath; plumage soft, silky and lax but copious; very nearly allied to the true Robins (*Erithacus*), only differing in their more delicate make, longer wings, toes and claws, and, the sexes differing in colouring. They are all foresters and shy; insectivorous, but have been observed to eat pulpy berries.

Mr. Ezra's beautiful specimen of this species, which adorns our frontispiece, aptly illustrates the above—it could well be described as a slender and graceful Blue Robin. It was confiding and steady, though not, at present as tight as it will be later. Its beauty cannot be done justice to in a word picture and even the artist would have a difficult task to do full justice to it in colour. The plumage is soft and silky, and the harmony perfect, so softly does one hue grade into another.

Description: *Male*. Above rich prussian-blue; below, varying depths of pale ashy-brown; forehead, broad streak above the eye, median wing-coverts, rump and upper tail-coverts glistening ultramarine-blue; lores, ear-coverts, eye-region, and tail black, the outer webs of the latter strongly suffused with blue; chin, throat, middle of breast, middle of abdomen and under tail-coverts white; flanks bright rufous-chestnut; bill dusky horn-colour; legs dark brown; irides deep brown. Total length $5\frac{3}{4}$ inches, of which the tail measures over $2\frac{1}{2}$.

Female: Olive-brown above, with the wing feathers pretty generally margined with rufous-brown, tawny-brown below, fulvous on the breast, eye streak, small shoulder-patch, rump, upper tail-coverts and margins of outer webs of tail-feathers blue, tinged with greenish on the rump; middle of throat, middle of abdomen, and under tail coverts white; flanks rufous-chestnut.

This exquisite species, which is called the White-breasted Blue Wood-Chat by Jerdon, ranges over the Himalayas, Central and Northern Asia, China and Japan. From Jerdon and Oates I gather that it keeps to the forests, perches low on small trees and brushwood; feeds on the ground, on various insects, and is met with on the bridle paths and roads, while so engaged; some pulpy berries are also taken but they are almost exclusively insectivorous. In India the nesting season is May and June; the nest is constructed with moss and grass and is placed in a hole in a bank or under a tree-root, and other similar positions; the clutch is four and the eggs are very pale greenish-white, sparsely spotted with rufous at the larger end.

THE WHITE-BREASTED KINGFISHER (*Halcyon fuscus [smyrnensis] Sykes*). In continuation of my note on page 382 of last issue, also in view of Mr. Goodchild's drawing and the interesting character of Mr. Townsend's exhibit, I am adding a full description and some notes of its wild life, the latter by the aid of Jerdon's "Birds of India."

This species is very common and well known in most parts of India, and is found throughout the whole peninsula and Ceylon up to the base of the Himalayas, extending eastwards to China.

While it is not found in thick forests, it prefers wooded districts and such places as the neighbourhood of large villages and cantonments, banks of rivers, and brooks, edges of tanks; it is also not uncommonly found quite away from water, in groves of trees, gardens, open jungle, etc., perching upon trees, poles, walls, old buildings and other similar positions; in such situations it watches for such prey as land-crabs, mice, grasshoppers, etc., upon which it pounces, returning to its perch to devour it. It is stated to build its nest on the bank of a nullah, hole in a bank, and holes in decaying trees. The clutch is variable, two to seven round fleshy-white eggs.

Description: The head, face, sides of head and body, abdomen and under tail-coverts rich mahogany-brown; scapulars and inner secondaries greenish-blue; back, rump and upper tail-coverts glistening caerulean-blue, wings chestnut-brown, median coverts black;

greater coverts and winglet dull blue; quills blue tipped with black; chin, throat, middle of the neck, breast and abdomen silky white; tail blue, centre feathers tinged with green; bill bright coral-red; feet vermilion; irides rich brown. Total length 10½in., tail 3.

THE SIKHIM SISKIN (*Chrysomitris tibetana*): Specimen of this interesting species, which was first introduced to English aviculture by Mr. Frost, I think, about three years ago, when collecting in India for E. J. Brook, Esq. A good pair was exhibited by Mr. J. C. W. Meadows, which secured recognition (5th), being in good form and really attractive and beautiful birds.

Description: *Male*. Above, olive green, the back and mantle streaked with black with a greenish tinge; streaks above and below the eye, chin, throat, and breast bright yellow; abdomen and under tail-coverts duller yellow; sides of body yellowish-green streaked with brown; ear-coverts and moustachial streaks olive-green; lesser and median wing-coverts, olive-green; greater wing-coverts brown, tipped and margined with yellow; quills, brown, outer-webs margined with olive-green; beak, light horn-colour; legs and feet flesh-colour, dusky in parts. Total length 4¼in., tail 1⅝in.

Female: Somewhat similar, but with the whole of the plumage more or less streaked with brown and the yellow areas much paler than the male, but her head and neck almost as bright and distinctly marked as his.

This fine species, which must be counted among the more handsome *chrysomitriae*, is found at Sikhim at high elevations, on the borders of Tibet. It is a most desirable species for aviculturists, as are all the Siskins.

THE BROWN-EARED BULBUL (*Hemixus flavala*). This beautiful and rare species exhibited by Major B. Horsbrugh, is another example of beautiful and soft gradation, yet withal its plumage is contrasty and striking, as the following description indicates:

Male: Above dark ashy-grey, with the crown dusky-grey and margined with lighter grey; wings and tail dusky; upper tail coverts and basal half of tail-feathers suffused with olive-green; the great wing-coverts and flights have the outer webs broadly margined with bright greenish-yellow; lores and a streak from base of lower mandible to ear-coverts black; ear-coverts soft silky brown-grey; chin, throat, centre of abdomen and vent white; breast, sides of neck and flanks soft, pale ashy; beak black; legs and feet plumbeous; irides deep rufous-brown. Total length 8½ inches, tail 3½.

Space will only permit me to state that the demeanour of this specimen and another I have met at the Zoo, indicate that in captivity they soon become tame and confiding; it is a bird of character, and is altogether charming, either as a cage or aviary pet. The bird at the show frequently uttered its loud, mellow warbling notes. The feathers of the crown are long and pointed, forming a handsome crest. Jerdon states that it associates in small parties and feeds both on berries and insects.

Distribution: Quoting Oates in Fauna of Brit. India—it frequents the pine forests of the Salween district in Tenasserim at 3,000 feet, and the Karen Hills east of Toungngoo from 2,000 to 4,000 feet.

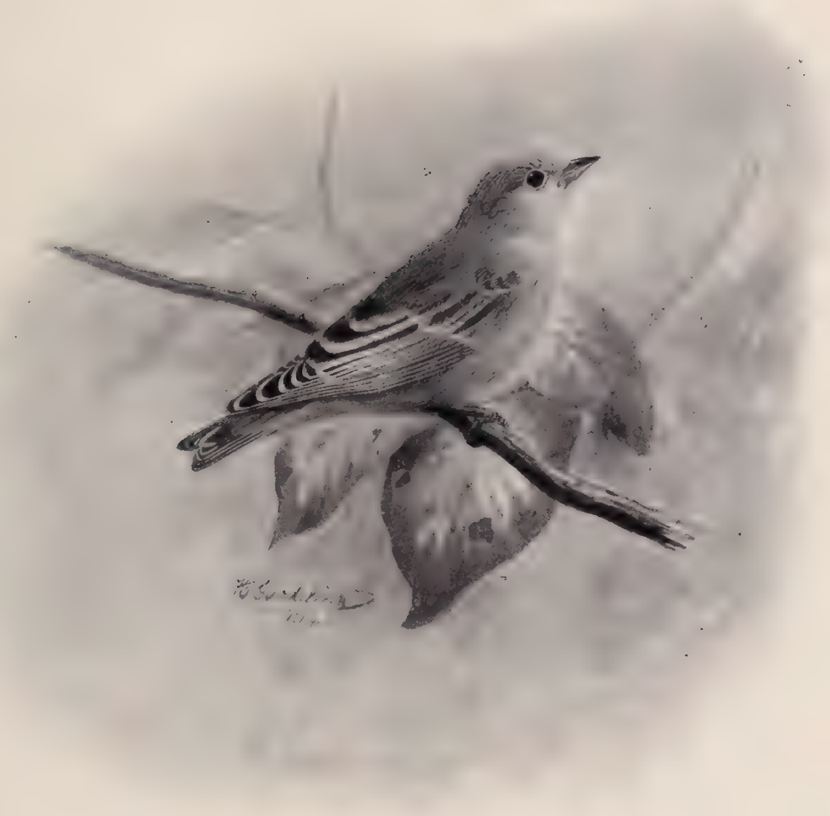
THE LARGE NILTAVA (*Niltava grandis*): Mr. Ezra's unique specimen was in grand form and very steady, but as we are figuring it in colour in the course of this volume, it must suffice to state that it is large for a Niltava, about the size of a small Starling (total length 8½ inches) and a bird of the Himalayas mostly purplish-blue, with numerous patches of glistening cobalt-blue, and the chin, throat and upper breast black.

THE RED-TAILED MINLA (*Minla igneotincta*). Another unique species, shown by Mr. A. Ezra, and, I believe, the only living specimen in Europe—this and the preceding species were introduced to English aviculture by Major Perreau in March, 1913. As this is also to be figured in colour, in a near issue of "B.N." I will merely remark that it is also a Himalayan bird; the Red-tailed Hill-tit of Jerdon, and that it is a bird of sharp contrasts, with body plumage of black, brown and white above and yellowish streaked with brown below, with areas of red or crimson on wings, rump and tail. Length 5½ inches, tail 2¼. A beautiful and vivaceous species.

THE INDIAN FIRE-CAP (*Cephalopyrus flammiceps*). This beautiful and minute species ranges over the Himalayas at from 3,000 to 9,000 feet; but winters in the plains.

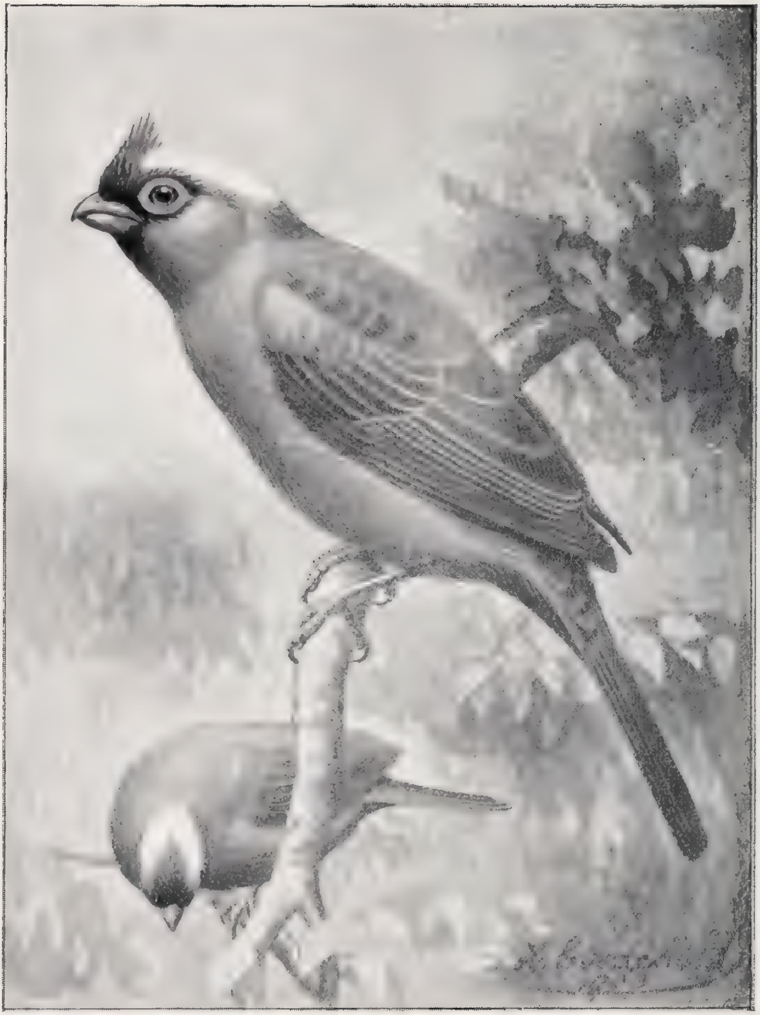
It is the Flame-fronted Flower-Pecker of Jerdon. The pair exhibited by Mr. Ezra were evidently immature birds, as, though in excellent condition, they were entirely lacking the lovely hues of the adult; these are, I think, the only living specimens in Europe.

Description: *Male*. Above olive-yellow, with the top of head and chin fiery orange-red; rump yellow; wings and tail dark brown



Avian Press Process

The Indian Fire-cap
or
Flame-fronted Flower-pecker.



From Life.

White-capped Tanager (*Stephanophorus leucocephalus*).

edged with dusky-yellow; sides of face, throat, and breast rich golden-yellow, remainder of under plumage paler and duller yellow; beak leaden horn-colour, legs and feet dark brownish-grey; irides deep brown. Total length 4in., tail barely 1½.

The female is somewhat similar to the male, but rather more dusky and has no red on her head and chin.

Oates states (Fauna of British India), that they breed in Aprii and May. and build a nest of fine grass in a hole in a tree stump usually at a low elevation.

The Chilian or Gay's Finch (*Phrygilus gayi*): This handsome and rare Finch, another exhibit of Mr. Ezra's, was rather hardly treated. It is a beautiful harmony of old gold and bright grey, and a most shapely bird. The female is similar to the male but the hues of her plumage not anything like so bright as those of the male.

The White-capped Tanager (*Stephanophorus leucocephalus*): Though known to aviculture for many years, very few of this beautiful species have been imported and such as have appeared have usually been long-lived. Mr. S. M. Townsend had one which was over 15 years old, I think, when it died and one lived at the Zoo for twenty years! A true pair would be the glory of any garden aviary—who will be the fortunate one to obtain them?

Description. Blue, brighter on the rump and sides of face, wing-coverts and margins of wing feathers blue; crown and nape silky-white, fronted by a small crimson vertical crest; forehead (feathers short and erect), lores and chin black; beak dark horn-colour, the lower mandible much paler than upper; feet brown; irides ruddy-brown. Total length 7in., tail 3⅜.

So far as I can judge from the few individuals that have come under my notice I deduce that not only is it hardy, but that it would be safe as part of a mixed series in a garden aviary.

It is easy to cater for it, as it takes all kinds of fruit, that is in season, insectile mixture and live insects. It is a bird of grace, dignity, and character; as well as great beauty and not a bird to pass lightly by when the opportunity arises to acquire it—it is a summer visitor to Argentina and I cull the following from Sclater and Hudson's "Birds of Argentina."

"It makes its appearance in the spring in the woods bordering "on the Plata River, and is usually seen singly or in pairs. The nest "is built in a tree ten or twelve feet from the ground, and is some-

"what shallow and lined with soft dry grass. The female lays four "eggs, white and spotted with red. During incubation the male sits "concealed in the thick foliage close by, amusing itself by the hour "with singing, its performance consisting of chattering disconnected "notes, uttered in so low a tone as to make one fancy that the bird "is trying to recall some melody it has forgotten, or endeavouring to "construct a new one by jerking out a variety of sounds at random. "The bird never gets beyond this unsatisfactory stage, however, and "must be admired for its beauty alone."

One fain would linger, but space forbids. It is also known as the White-crowned Tanager, while Azara gave it the euphonistic title of "Blue White-headed Beautiful." This specimen was in faultless condition, and exhibited by Miss M. Bousfield.

YUCATAN JAY (*Cissolopha yucatanica*). Major Horsbrugh recently privately imported some Yucatan birds, and among them five of this species, two of which have passed into the possession of Mr. H. D. Astley. Major Horsbrugh kindly invited me to Tandridge Manor to see the birds and his water-fowl. Owing to a misunderstanding and not having time to look the species up, an error crept into my note on page 380 of December issue, and this paragraph is intended to supersede that note. It is a rare and beautiful species, new to the show-bench; not only the one exhibited but the others were uncannily tame, having been hand-reared, and when approached, opened their beaks and called lustily for food—they knew no fear and had no objection to being handled—they were not yet in full mature plumage though fast approaching same, the blue areas will be much more intense a little later. Adult plumage: Bill, whole of the head and underparts glossy black; back, wings, rump, tail-coverts and tail, rich shining blue; eyelids, legs and feet orange-yellow. A handsome but mischievous pet.

LEVAILLANT'S PARROT (*Pococephalus robustus*). This was the only species of PSITTACI new to the bench and was very hardly treated. It is impossible for me to fully describe it in a short paragraph and space will not permit more, therefore I will merely quote from a recent letter of Mr. Raynor's concerning it, as follows:—

"*P. robustus* closely resembles *P. fuscicollis* (Brown-headed Parrot), "but is larger. It has a fearsome beak, and at present is uncomfort-"ably shy. Although it has moulted with me, its larger body feathers "are rather ragged. The Zoo does not just now possess a representa-

"tive of this species, which, like its congeners is a native of West "Africa."

I need not add to this but must pass on.

I see *Punch* has immortalised Mr. Hill's centenarian Cockatoo by a poem in their last issue; instead of making any personal comment on the bird, I am reprinting their ode here, with apologies to the Proprietors of *Punch*:

TO A CENTENARIAN COCKATOO.

(*Reprinted from* PUNCH, *December* 24, 1913).

Creature of mystery, above whose head
More than a hundred years, I'm told have sped,
Strange Bird, who should by every right be dead.

Yet seem to all appearance just as well
As when your dam, with forest-splitting yell,
Proclaimed you issuing from your native shell.

I wonder, when you muse upon the lot
That brought you to this age of heav'n knows what,
If you congratulate yourself or not.

Great are your blessings. You can still digest
Trifles like nuts and matches with the best;
You still retain a lively interest

In the vain plumage you so much approve;
And—inwardly—I grieve to say, you move
Still in the same unalterable groove.

Your gift of speech does not advance with age;
It is not guarded, apposite or sage;
You have one joke, to lure within your cage.

Some kindly finger, and, with sudden beak
Transfix that member till its owner squeak;
As manners this is poor, as humour, weak.

Far from that alien country in whose trees
Your wilding brothers had their little sprees,
Here you have sojourned in superior ease.

You did not share with them the daily risk,
That keeps the faculties agog and brisk.,
Of passing to oblivion in a whisk,

And oft, no doubt, in this your easy state
You chuckle at the grim and tragic fate.
That must have caught those others, soon or late.

Yet these your kin, however rough their lives,
Had active times and multitudinous wives;
While you, the sole relation that survives—

It never has been yours in Spring to screech
A mad love-music, not in human speech
But in the language love alone can teach.

The flamelike crest that you so proudly raise,
Though you have flaunted it these myriad days,
Has ne'er been lifted for a female's praise.

The plumes that you have preened and kept so neat
You have but tended for your own conceit
Not for the winning of some dearer sweet.

Musings like these may possibly have stirred
Your inmost soul—although it seems absurd,
They being suited to a younger bird.

Still, even with the old are moments when
Such feelings touch them—lightly—now and then;
Though you for all I know may be a hen. DUM-DUM.

I must perforce call a halt here, as this issue could easily be filled with notes of the many beautiful species staged by members of the F.B.C., for, as already stated in my opening remarks, over eighty per cent. of the foreign bird entries were from our members and I must congratulate them on the many beautiful and unique specimens they possess, also on the condition they keep them in. I must now pass on to the respective classes, as the briefest review with awards must occupy considerable space.

Mr. F. Finn judged classes 169 to 176, and Mr. D. Seth Smith the remainder; some of the placings occasioned much criticism.

169. COCKATOOS AND MACAWS (4): Nothing new was staged, but the four exhibits were all well put down and in good plumage.

1 and 4, C. Roehl, Leadbeater's and Small Sulphur-crested Cockatoos; 2, S. Williams, Ducorps' Cockatoo; 3, Mrs. Newmarsh, Red and Yellow Macaw.

170. GREY AND AMAZON PARROTS (9): The most uncommon bird here was Salvin's Amazon, but this individual was not as tight in plumage as it might have been; the majority of the exhibits were Blue-fronted Amazons, and it was interesting to note the variability of plumage with this species, no two being alike and the extremes looking as if they belonged to some other species. Nearly the whole were in excellent plumage.

1, J. Schlüter, Grey Parrot; 2, Mrs. E. Johnston, Blue-fronted Amazon; 3 Rev. G. H. Raynor, Grey Parrot; 4, Mrs. R. Lupton, Blue-front; 5, L. M. Wade, Salvin's Amazon; 6, Vipend, Blue-front; 7, Rapson, Grey Parrot.

171. LOVEBIRDS AND BROTOGERYS (10): An inter-

esting class of Lovebirds and the smaller Parrakeets, but all the exhibits had not the full complement of claws and some not fully clear of the moult.

1, 4 and 5, Miss A. B. Smyth, White-winged Parrakeet, Red-faced Lovebirds and Tui Parrakeets, a nice trio, in good form, but the last named with cut wing; 2, Miss Clare, grand pair of Peach-faced Lovebirds, but feet not perfect; 3, S. Beaty, perfect Black-faced Lovebirds; 6, Col. Routh, and 7, J. Schülter; other Black-faced Lovebirds. Blue-winged and Madagascar Lovebirds also staged.

172. A.O.S. Parrots (6): The writer found it difficult to understand the placings here or from what base they were made. Mr. Raynor's rare Aubry's and unique Levaillant's Parrots having to be content with 4th and 5th respectively! The latter a first appearance.

1, 4 and 5, Rev. G. H. Raynor, Red-vented Parrot, perfect and very rich colour, Aubry's Parrot, perfect and rare, Levaillant's Parrot (new to shows), unique, but not quite as tight as it might be; 2 and 3, C. T. Maxwell, Senegal Parrot, a nice bird, but decidedly lucky to be so placed in such company, and a good Blue-rumped Parrot which should have preceded the Senegal; L. M. Wade, Red-vented Parrot.

173. Green Budgerigars (17). A nice array of this charming but common species; those placed winning on size, depth of colour and lacing.

1, Mrs. D. Longden; 2, Col.Routh; 3 and 7, J. Frostick; 4, A. Silver; 5, R. J. Watts; 6, Mrs. D. Longden.

174. Ring-neck and Other Common Parrakeets (2).

1 and 2, Miss A. B. Smyth, pair Red-rumps, not sleek, pair Rosellas, not tight; 3, W. Frost, good pair Alexandrines; 4, 6 and 7, Mrs Newmarsh, Red Rosella, Alexandrine, and Cockateils; 5, W. Baxby, another good Alexandrine. A very fine pair of Quaker Parrakeets were also shown.

175. Lories, Etc. (6). The most noticeable of this class were the Red-collared Lorikeets, several of which were of a very intense colour.

1, Mrs. D. Longden, perfect Red-collared Lorikeet, very intense; 2 and 6, J. Frostick, Yellow-backed and Purple-capped Lories, rich colour and in good form; 3, Hon. Mrs. Morrison, very steady Red-collared Lorikeets; 4, and 5, C. T. Maxwell, Red-collared and Ornate Lorikeets. Several good exhibits in this class were kept down by cut wings.

176. A.O. Parrakeets: Only three entries, and of these Miss L. Clare's Queen Alexandra and Hooded Parrakeets

were deservedly first and second, being in superb condition and feather; the third prize going to Mr. Meager's Mealy Rosellas—a most disappointing entry.

177. Yellow Budgerigars, W. Java Sparrows (12).

1 A. J. Shipton, very fine pair Yellow Budgerigars, green markings quite obscure; 2 Rev. J. Paterson, grand White Java, very pure; 3 F. J. Andrews, very fine pair of White Javas; 4, 5, and 7 A. Silver, Bengalese and White Javas, both good, and Yellow Budgerigars good colour, but green marking rather distinct; 6 Miss A. B. Smyth, Yellow Budgerigars, good colour with green markings not too distinct.

178. Common Mannikins (39). Quite a brave show, and nearly every exhibit in good feather and condition.

1 S. Beaty, Combasou, perfect, best I have ever seen; 2 Miss M. Bousfield, perfect pair Grey Javas; 3, 4, 5, and 7, A. Silver, Magpie Mannikins, Combasous, Sharp-tailed Finches, and Bronze Mannikins; 6 C. Cooper, Bib Finches, White-headed, Black-headed and Tricolour Mannikins; Bib and Spice Finches also staged.

179. A.S. Weavers and Whydahs (18): A most interesting class, containing many rare or very uncommon species, two new to the show-bench, and others not often met with of late, several of which were hardly treated though in good form—the more notable will be referred to in a later issue.

1 R. J. Watts, Queen Whydah, perfect in every way, distinctly lucky, as it shed its long racket tail-plumes the opening day of show, but not until after awards were up; 2 and 4 S. Beaty, Golden-backed and Gold-collared Paradise Whydahs, uncommon, rich colour, perfect; 3, 5, and 7, S. Williams, Mahali Weaver (new to the bench), Golden-backed Whydah, and Black-headed Weaver, an uncommon trio, all in good form; 6, G. Fletcher, Chestnut-backed or Bronze Weaver, a first appearance and new to aviculture, should have been higher.

Photo by) *(E. O. Page.*

Giant Whydah.

Mr. S. Williams staged a most interesting series, viz., Baya, Grenadier, Small-masked, and Taha Weavers; in addition to those placed. Orange, Short-winged, Rufous-necked and Crimson-crowned Weavers were also staged—an unusually interesting lot, but the rarer species not so beautiful as those more freely imported.

Photo by E. O. Page.

Queen Whydah.

Ribbon Finches, Silverbills (16). All the winners here were in best of condition and feather, the unplaced birds running them very close.

1 R. J. Watts, Ribbon Finches; 2 A. Silver, African Silverbills; 3 E. Hattersley, Zebra Finches; 4 F. J. Andrews, Saffron Finches; 5 Miss M. Bousfield, Ribbon Finches; 6 W. Buckingham, Indian Silverbills; 7 J. C. Schlüter, Zebra Finches.

181. Gouldian Finches (23): A goodly array of really excellent birds, some standing out from the rest in size and depth of colouring. Some pairs, contained one excellent bird, with a mate having a faulty foot, or dropping its wings badly—must have given much trouble in sorting out—"R.H." =Red-headed, and "B.H."=Black-headed.

1 W. Buckingham, R.H.; 2 Miss Backhouse, B.H.; 3 and 4 Miss M. Bousfield, B.H. and R.H.; 5 G. S. Woodcock, B.H.; 6 J. C. W. Meadows, R.H. ♂ and B.H. ♀; 7 R. Mannering, B.H.

182. Fire-tails, Parrot Finches, Etc. (17). A very even class, but the Fire-tailed Finches were an easy

first. It also contained two entries by Mr. W. Frost—good specimens of Fijian or Peale's and Tri-coloured Parrot Finches—not for competition.

1 C. H. Row, Fire-tailed Finches, a perfect pair; 2 Mrs. E. Galloway, good Tri-coloured Parrot Finch; 3 and 6 Miss M. Bousfield, pairs of Pin-tailed and Common Parrot Finches in best form; 4 C. T. Maxwell, another good pair of Common Parrot Finches; 5 L. W. Hawkins, Painted Finch; 7 G. S. Woodcock, fine pair Pintailed Parrot Finches; 5 L. W. Hawkins, Painted Finch; 7 G.S. Woodcock, fine pair Pintailed Parrot Finches (Nonpareils). Some specimens of Ruficauda Finches in exquisite condition were also staged, but the Pintails evidently got full recognition as being a difficult species to keep.

183. A.O. GRASSFINCHES AND MANNIKINS (27). An interesting class, all very even, must have been difficult to separate, as in addition to the placed birds, the following species were also represented: Common Quail, Pectoral, Chestnut-breasted, and Bicheno's Finches; all in best show form.

1 C. T. Maxwell, perfect pair Yellow-rumped Mannikins; 2 R. J. Watts, Black-faced Quail Finches (see plate, Dec. "B.N."); 3 Miss M. Bousfield, Masked Grassfinches; 4 Rev. J. Paterson, L.T. Grassfinches; 5 J. Schlüter, Diamond Finches; 6 Miss A. B. Smyth, very fine Red-headed Finch (♂); 7 A. Silver, L.T. Grassfinch. A most interesting series of beautiful birds.

184. COMMON FIREFINCHES, CORDON BLEUS, ETC. (41): This was the largest class in the show and a grand lot too. A look over them excited no surprise at their popularity, common they may be, but beauty beyond the average they certainly possess, neither do they lack in interesting characteristics. An object lesson, showing how beautiful a series of foreign birds may be obtained at small cost, whether for bird-room or aviary.

1 and 7 F. Howe, one of the richest pairs of Zebra (Gold-breasted) Waxbills ever seen, and a good pair of Cordon Bleus; 2 H. Strong, Zebra Waxbills, v.f. pair; 3 S. Beaty, Firefinch (♂), rich colour, one of the best; 4 and 6 A. Silver, Fire-Finches and Lavender Finches (these latter spoiled each others plumage after judging was over); 5, R. Newley, excellent pair Fire-finches.

185. AVADAVATS, ST. HELENA, GREY AND ORANGE-CHEEKED WAXBILLS (29). Another level lot of beautiful common (freely imported) species. All the species included in the classification well represented.

1 Col. J. J. Routh, Green Avadavats; 2, F. Howe, St. Helena Waxbills; 3 A. Silver, Com. Avadavats; 4 R. Newley, Orange-

cheeked Waxbills; 5 Miss J. W. Blagg, Red Avadavats; 6 H.T. Gibb, Green Avadavats; 7, Miss J. W. Blagg, Grey Waxbills.

186. A. O. WAXBILLS (26). Must be counted as one of the finest classes in the Show. though some very beautiful exhibits by Mr. W. Frost (eight entries) were not for competition, including Jameson's and Vinaceous Firefinches; Dufresne's, Red-faced and Aurora Finches; Black-cheeked and Blue-breasted Waxbills. The Violet eared Waxbills, Melba Finches, etc., provided a feast of beauty not often seen.

1 C. T. Maxwell, Peters' Spotted Firefinch, little rough on crown, but otherwise good, beautiful and rare; 2 Col. J. J. Routh, Violet-eared Waxbills, a perfect pair, very intense colour; 3 J. Frostick, Ruddy Waxbills; 4, Miss M. Bousfield, exquisite Melba Finch; 5 H. Strong, Dufresne's Finches, v.f. pair; 6 L.W. Hawkins, good pair Melba Finches; 7 R. J. Watts, other Melba Finches.

187. CARDINALS (5). A matter for surprise that this class should prove a failure as they are popular birds.

1, F. S. Matthes, Green, v.f. ♂, 2 L. Montgomery, Red-crested; 3 Col. J. J. Routh, pair Virginians, not tight; 4 Mrs. Moore, Virginian ♀; 5 Miss A. B. Smyth, beautiful pair Red-crested, might have been second.

188. SERINS AND SISKINS (9).

1 A. Ezra, Chilian Siskin (*Chrysomitris atrata*), very rare and in best form; 2, W. H. Vale, Alario Finch, very clean, and evenly marked, 3 Mrs. Greene, Black-headed Siskin; 4 Rev. G. Paterson, Alario Finch; 5 and 6 J. C. W. Meadows, good Sikhim Siskins, a beautiful species, and a good Black-headed Siskin; 7, C. Cooper, nice Grey-necked Serin.

189. TRUE FINCHES, GROSBEAKS, ETC (26). The notable exhibits here, viz., Blue Chaffinch, and Sepoy Finches have been noticed several times in our pages. I did not recognise the species of Mr. Williams' Grey Grosbeaks, not *Spermophila grisea*, but altogether larger birds, rare but certainly not pretty. Mr. A. Ezra staged an interesting and rare species in the Chilian or Gay's Finch (*Phrygilus gayi*), not tight in plumage—a pretty colour arrangement of old gold and grey.

1 A. Ezra, Blue Chaffinch, perfect and very rare; 2 Miss A. B. Smyth, Rose-breasted Hawfinch ♂; 3 S. Beaty, Cuban Finches; 4 E. Hattersley, good Sepoy Finch, but yellow instead of the fiery-red of the wild bird; 5 Miss A. B. Smyth, Black Grosbeak or Seed-Finch (*Melopyrrha nigra*), very uncommon, in good form; 6 S. M. Townsend, Sepoy Finch, another cage-moulted specimen, but a deeper colour than the 4th prize—in the writer's opinion the placings should have been transposed; 7 S. Williams, Grey Grosbeaks. Other interest-

ing species were also staged, viz.: Euler's Diuca, Yellowish, White-throated and Mexican Rose-Finches; Ruddy, Rock, and Hair-crested Buntings; Desert Bullfinches, etc.

190. DOVES, QUAILS, ETC. (2). The reason of the failure of this class evidently is, that such species are kept in aviaries and are very wild when caged—for good numbers of many species of foreign Doves and Quails are kept in captivity, and many species breed regularly in their owner's aviaries.

1 W. J. C. Frost, Douglas Quail; 2 J. Schlüter, pair Diamond Doves, perfect, might have been first.

191. A.S. SUGAR AND SUNBIRDS (11). I have already noted Mr. Ezra's fine team of Sunbirds (see Dec. "B.N.") and it only remains to say that all the others were objects of beauty and interest; their condition and exquisite plumage being beyond praise. With birds of such elegant and graceful form, combined with brilliant metallic plumage, it is not surprising that they were the centre of attraction of the Show.

1, 2, 3, 4, 5, and many specials, A. Ezra; Southern Malachite, Greater Amethyst, Lesser Double-collared, Amethyst-rumped, and Black-breasted Yellow-backed Sunbirds, a grand quintet, beyond praise from every standpoint; 6 Lady K. Pilkington, exquisite Black-head Green Sugarbird; 7 C. T. Maxwell, good Purple Sugarbird (♀), Col. J. J. Routh exhibited here the richest coloured Gold-fronted Fruitsucker the writer has seen.

192. CERTAIN NAMED TANAGERS (16):

1, Mrs. Thyme, Maroon; 2 S. M. Townsend, exquisite Tricolour; 3 and 7 Col. Routh, Superb and Scarlet: 4 Lady K. Pilkington; Blue; 5 C. T. Maxwell, Scarlet; 6 Miss M. Bousfield, Maroon—all good and beautiful birds.

193. A.O. TANAGERS (12). Contained many beautiful and uncommon species, some of which were very hardly treated, among which I may mention Lady K. Pilkington's Blue and Black and Black-cheeked Tanagers, both perfect, yet unnoticed; also Mr. S. M. Townsend's superb Black-backed and Colonel Routh's Golden-shouldered Euphonia. The placings certainly gave rise to considerable comment.

1 A. Ezra, good pair Petre's cock, not yet full colour, very lucky; 2 and 4 Miss M. Bousfield, White-capped and Festive; 3 C. T. Maxwell, Red and Black (*Phlogolthraupis cruentata*), unique, but tail a little rough; 5, S. M. Townsend, Black-backed, perfect, clean rich colour, hardly used; 6 Mrs. Sevastopoulo, Rufous-throated Sugar-

bird; 7 Col Routh, Golden-shouldered Euphonia, perfect and rare, might have been higher.

The Black-cheeked or Lesser Rufous-headed (*Calliste cayana*) has only appeared on the show bench once previously and is but seldom obtainable. This species was figured in colour and described in "B.N.," Vol VII., page 137.

194. Bulbuls, Shamas Etc. (11). The rarest bird here, a first appearance, I think, was Major B. R. Horsbrugh's Brown-eared Bulbul (*Hemixus flavala*), which is described elsewhere in this issue.

1 Major Horsbrugh, Brown-eared Bulbul; 2 Lady K. Pilkington, Black-crested Yellow Bulbul, very uncommon, good order; 3 Col. Routh, Red-eared Bulbul; 4 J. Frostick, perfect Shama; 5 and 6 Miss A. B. Smyth, Pekin Robins and Shama; 7 F. J. Andrews, Shama. An interesting class, all birds of character and all in perfect order.

195. Crows, Troupials, etc. (16). A most interesting class, the outstanding exhibit being Major Horsbrugh's Yucatan Jay (*Cissolopha yucatanica*), not merely new to the show bench, but new to aviculture, a beautiful species of a mischievous group. Another bird which cannot be passed without notice was Mrs. Warren Vernon's Hunting Cissa, besides its gorgeous plumage, it was uncannily tame, and permitted anyone to handle it through the wires of the cage just as they pleased, I fear many coveted it.

1 Major Horsbrugh, Yucatan Jay, unique and interesting, easy first; 2 A. Silver, uncommon Mandarin Mynahs; 3 Mrs. Warren-Vernon, Hunting Cissa, a charming bird; 4 B. T. Stewart, Wandering Tree-pie, in splendid form; 5 and 6 W. R. Shepherd, Larger Hill Mynah and Chinese Jay-Thrush; 7 G. Fletcher, Brazilian Hangnest, perfect, very intense colour.

Yellow-headed and Flame-breasted Marsh Birds, Glossy Starlings, Troupials, and Lesser Hill Mynahs also staged.

196. Hybrids, Albinos, etc. (15). This class was pretty well reviewed in December "B.N.," and it only remains to give the awards.

Miss L. Clare staged an exquisite pair of Blue Budgerigars, which were very hardly treated, true the hen had an imperfect foot, but in all else, pure colour, size, and general fitness were all that could be desired.

1 and 2, A. Ezra, Lutino Ring-neck and Lutino Blossom-head Parrakeets, the latter a young bird and not in such perfect form as the Ring-neck; but a charming bird; 3 R. S. de Q. Quincey, Parson-

finch × Long-tailed Grassfinch Hybrid; 4 Miss A. B. Smyth, Red-headed Finch × Cutthroat Hybrid; 5 E. Pelham Sutton, Blue Budgerigar; 6 Rev. J. Paterson, Hooded Siskin × Canary Hybrid; 7 G. S. Woodcock, Silverbill × Bengalese Hybrid.

197. Flycatchers, *Tits*, etc. (12): Every exhibit of more than usual interest, mostly beautiful, rare and in excellent form—no less than four first appearances, all owned by Mr. A. Ezra.

1, 2, 3, 4, and specials, A. Ezra, Small Minivet (new to shows), Large Niltava (new to shows), Short-billed Minivet, and Red-flanked Bush-Robin (new to shows), an exquisite quartet, noted elsewhere; 5, Lady K. Pilkington, exquisite Loo Choo Robin, a fine songster; 6, Major B. Horsbrugh, Blue-fronted Redstart, in fine form, but will be more brilliant later on; 7, J. Frostick, beautiful and rare Japanese Redbreast.

A true pair of Indian Fire Caps (A. Ezra) were also staged, but unnoticed, not being in full colour, small as English Gold-crest. Excellent specimens of Silver-eared Mesias, Rufous-bellied Niltavas and Black-headed Sibias also exhibited.

198. All Other Species (13): This class also contained more (3) first appearances and many other beautiful and rare species, some of which have been described in past vols. of *Bird Notes* or in my opening notes.

1 and 3, Lady K. Pilkington, exquisite pair of Black-chinned Yuhinas (see plate in last issue), and a most interesting and quaint Black-throated Wren-Babbler (see "B.N.," Vol. IV., N.S., page 106), both new to shows; 2, A. Ezra, Red-tailed Minla (new to shows and aviculture), my choice for first, unique; 4 and 6, S. M. Townsend, Pigmy Woodpecker, already described and figured (see "B.N.,', Vol. IV., N.S., page 105), and an Indian Kingfisher, uncommon and beautiful; 5 and 7, C. T. Maxwell, perfect Levaillant's Barbet, and rare and exquisite Pink-crested Touracou.

Other exhibits of more than passing interest were: Blue Thrush, Blue-headed Rock Thrush, Cuban Trogon, Rusty-cheeked Babbler and a Pied Rock Thrush.

199. Selling Class (Limit 25s.) contained some good birds.

1, F. Howe, Rock Bunting; 2, L. W. Hawkins, Common Quail Finches; 3, J. C. W. Meadows, Zebra Waxbills; 4 and 5, F. Howe and W. Buckingham, Green Avadavats; 6, Grey Waxbills; 7, H. Brumbridge, Ribbon Finches.

Other exhibits were: South American Hawks, Rose-breasted Cockatoo, and Red Rosella Parrakeet.

200-1. Members L.C.B.A.:

SEED-EATERS (12). 1, Thynne, B.H. Gouldian Finch; 2, 4, and 6, A. Silver, Blue-breasted Waxbills, Aurora, and Chestnut-breasted Finches; 7, Paterson, Diamond Sparrow. SOFT-BILLS (3): 1 and 2, Dewhurst, Coleys and Glossy Starling; 3, Thynne, Blue Tanager.

FOREIGN BIRD CLUB SPECIALS.

F.B.C. Silver Medal for Best Bird in Classes 169-176: J. C. Schlüter.—Grey Parrot.

F.B.C. Silver Medal for Best Bird in Classes 177-190: C. T. Maxwell.—Peters' Spotted Firefinches.

F.B.C. Silver Medal for Best Bird in Classes 191-198: A. Ezra.—Southern Malachite Sunbird.

F.B.C. Bronze Medal for Most Points in Classes 169-176: Miss A. B. Smyth.

F.B.C. Bronze Medal for Most Points in Classes 177-190: A. Silver.

F.B.C. Bronze Medal for Most Points in Classes 191-198: Lady K. Pilkington.

2s. 6d. by Miss A. B. Smyth for Best Non-winner in Class 191: Col. J. J. Routh—Gold-fronted Fruitsucker.

2s. 6d. by Miss A. B. Smyth for Best Non-winner in Class 193: Lady K. Pilkington.—Blue and Black Tanager.

10s. 6d. by A. Ezra, Esq., for Best Sugar Bird: Lady K. Pilkington—Black-headed Sugarbird.

10s. 6d. by A. Ezra, Esq., for best Fruitsucker or *Zosterop*: Colonel J. J. Routh, Gold-fronted Fruitsucker.

Mr. A. Ezra won most points in the London Cup Competition.

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Birds Bred at Poltimore Park Aviaries, 1913.

BY LORD POLTIMORE.

CHATTERING LORY (*Lorius garrulus*). We have had the good fortune this year to rear one Chattering Lory, which to be candid, was a great surprise to everyone, as no one ever suspected its existence, until it was discovered one fine morning, feeding with the older inmates of the aviary.

The aviary measures 43 feet long, 36 feet wide, and 12 feet high, nearly half of which is covered in by a substantially built house, and it was in this house that early in spring we fixed up one of Mr. W. T. Page's excellent nesting barrels, 15in by 12 in.

An egg was found in this barrel on August 19th, It was pure white and about the size of a pigeon's egg. A pair of Chattering Lories were observed to be spending a great deal of time indoors, and on again looking into the barrel at the end of September, the aviary attendant was disappointed to see nothing.

However, a week later he fancied he heard a noise inside the barrel, but put it down to the lively inmates of of the adjoining aviary, and did not investigate the matter further. When feeding the Lories on the morning of October 29th, he was quite nonplussed when he counted three Chattering Lories instead of two.

On closer examination he noticed that No. 3 had a black-brown beak, the orbital region was naked and grey, and the eyes appeared to be dark.

The plumage was the same as the parent birds, but the young bird was a trifle smaller.

The Lories are fed daily on sponge-cake and Nestlé's milk made into a sop with warm water, and given to them nearly cold, plenty of bananas and grapes. Twice a week they have insect food, and meal worms three times a week.

Since September, the temperature of the aviary has been kept from 65° to 70°, but they have access to the large out-door flight all the year, unless in very cold frosty weather or wet days, when they are only let out to exercise when the sun is bright and warm.

I must not forget to mention that last spring we hung large sheets of waterproof canvas round the outside of the aviary, so as to disturb the inmates as little as possible.

This aviary contains the following birds :

Chattering Lories (*Lorius garrulus*).
Yellow-Backed Lories (*L. flavo-palliatus*).
Purple-Capped Lories (*L. domicella*).
Red-collared Lorikeets (*Trichoglossus rubritorques*).
Swainson's Lorikeets (*T. novae-hollandiae*).

THE BREEDING OF HYBRID CONURES.

YELLOW-HEADED (*Conurus jendaya*) × GOLDEN-CROWNED (*Conurus aureus*). The Yellow-headed Conure has been in a large out-door aviary (43 feet wide, by 64 feet long, by 12 feet high, including the house, which is heated in winter) for the last 3 years, the Golden-crowned Conure for about 2 years.

The birds paired in November, 1912, and on January 17th of this year (1913) a clutch of five eggs was discovered in a box, which they had been frequenting for some time.

They did not incubate, owing to disturbances from other inmates of the aviary.

On March 7th they went to nest again, this time with four eggs, after incubating for some time, they were again disturbed.

On May 8th a third clutch consisting of four eggs, was found in the same nest, incubation lasted about 23 or 24 days, and both parents incubated. On looking into the box on June 4th we found two young birds.

As it was apparent the old birds were feeding satisfactorily, the nest was not examined for another month, and then the young were covered with down, and stubs of feathers.

On July 19th the parent birds were shut out of the box by fastening wire bars across the end of the box about an inch or so apart, so as to let the old birds feed, and at the same time to prevent the young leaving the nest prematurely, as on previous occasions we had in the same way lost several valuable young birds.

A little later a tin of seed (canary, sun-flower, hemp, and occasionally green oats), and a tin of water were fastened to the bars of the box, and the young were thus able to feed themselves.

On September 18th, the two young Conures were put in a small aviary along with a young Adelaide Parrakeet, who unfortunately, is the sole survivor of a family of five, four having been done to death by other Parrakeets in the aviary.

The young at first resembled the Yellow-headed Conure except that their colour was a little duller, and they had more orange-yellow on the fore-head, but now one young bird has more orange-yellow than the other, on the forehead and crown, as well as round the eye circle. In the neck a few green feathers are showing amongst the yellow.

This aviary contains the following Parrakeets:—

Pennants' (*Platycercus elegans*)..

Adelaides (*P. adelaidae*).

Rosellas (*P. eximius*),
Blue-Bonnets (*Psephotus haematorhous*).
Lineolated (*Bolborhynchus lineolatus*).
Tovi (*Brotogerys jugularis*).
Many-Coloured (*Psephotus multicolor*),
Red-rumped (*P. haematonotus*).
Budgerigars (*Melopsittacus undulatus*).

Conures:—

Yellow (*Conurus solstitialis*).
Black-headed (*C. nanday*).
Blue-crowned (*C. haemorrhous*).
Cactus (*C. cactorum*).
Red-bellied (*Pyrrhura vittata*).

The food consists of canary, millet, sunflower, and hemp, white oats, and greenfood, also a supply of grit and cuttle-fish bone. Fruit and mealworms occasionally.

I might mention that the Yellow Conures (*Conures solstitialis*) have laid two clutches of eggs this season, but without result so far.

To be continued.

◆

The Value of Heat for Ailing Birds.

By Dr. L. Lovell-Keays.

For years past I have always regarded heat as of first importance in restoring ailing birds. Lately I have had more than an ordinary dose of ailing birds. In every case I have applied heat (dry heat—I don't mean warmth but real *heat*), and the result has been nothing short of miraculous. I have been carrying out a series of experiments with the heat treatment. Let me quote a case or two: One day, about a month ago, I picked up my Columbian Siskin very ill: I kept her in a very warm place and she revived at once. Unfortunately, I had no means *then* of continuing the heat throughout the night, with the result that she died in the night. Kitchen cupboards and the like get much cooler about 4 a.m. when the bird most requires the heat.

Two or three days afterwards I "picked up" (oh, horrid phrase, pregnant with remorse and blighted hopes) my hen Hooded Siskin. I put her into a travelling cage and literally baked her for about three days. She completely recovered, and is now as fit as ever; and yet her case seemed very bad. But the most wonderful cure of all was that of a hen (why is it they are all hens?) Pectoral Finch. My wife, who has had considerable hospital experience became quite impatient. The bird was apparently "as dead as a door nail." I held it in front of a bright kitchen fire for 10-15 minutes, and then popped the bird in a cage into the oven. In ten hours time it had opened its eyes and was on its own keel. By bed-time it was on its feet. That night I kept it in a box underneath which a powerful duplex lamp burned all night. To make a long story short the bird made a complete recovery, and yet was absolutely apparently dead.

I could multiply successful cures *ad lib.* but I don't think any good purpose would be served by doing so.

Have you ever failed, you ask? Yes, I have, and in all cases it has been because I have not persevered with the treatment, which I find takes about two or three days, during which time the temperature must never fall below 60°. I will roughly describe my recovery hot-air-chamber. It is in reality part of my new aviary and was not really designed as a "sick bay." The floor is covered externally with a square of zinc sheeting to prevent it catching fire and the front is half-inch mesh wire netting. The sides are wood. The lamp is fixed well below the floor and immediately underneath. The whole forms a kind of propagator, so beloved of gardeners. It is then heated uncomfortably warm and yet birds revel in it.

If you have never tried the effect of real heat, do! You will be positively amazed, but remember there must be no half measures, and above all persevere. Don't be misled by the fact that the bird is apparently quite fit the next day. If you are and let it out it will only get a relapse and die. You will then say the treatment is useless. Given a fair trial and I will guarantee you will cure *at least* 50 per cent. of the birds you used previously to lose. Being a medical man I am keen on treatment and I can honestly say nothing approaches the heat treatment for general success, so I am anxious to give others my happy experiences.

Birds which have been subjected to above treatment must not be put out of doors into cold quarters till they have been properly hardened off.

[Dr. Lovell-Keays is apparently not aware of the extent to which others have used heat, both for acclimatisation purposes and for ailing birds. Several times, Mr. H. Gray, our Hon. Veterinary Surgeon, has advised dry heat in the Post Mortem Reports, especially as regards egg-binding, we will quote one: "Continuous dry heat of a high degree is better than steaming." This quotation, we believe to be the first reference to dry heat as a remedy for egg-binding in the public press, and Mr. Gray has since repeated it in other journals. The writer too, has used it with birds picked up helpless, and thus saved many, and has quoted the instance of a Magpie Mannikin many times, which was subjected to extreme heat and recovered, after which it was kept indoors for that winter and lived out of doors for three years afterwards, having been eight years in his possession when it died—thus it was an acclimatised bird at the time of its illness. Several have used acclimatisation cages with a chamber underneath in which a lamp was kept burning and have also used these cages as sick wards. Others, possessing hot-houses, have saved new arrivals when almost *in extremis* by placing the cage in the hot-house, but this was not dry heat though averaging 80° F. However, all these notes are more or less obscure being buried among other details, and we are greatly obliged to Dr. Lovell-Keays for his important and interesting communication; a very significant feature of which is, that he subjected all ailing birds (some apparently dead) to his dry heat treatment irrespective of character of illness with great success. We trust this is but one of many communications on all topics of aviculture that will appear in the Club Journal from his pen.

Before closing this note I will again quote Mr. H. Gray, for the benefit of our members on this important topic:

"Birds can withstand a temperature of 100° F. or more for "hours together. This is due to the fact that birds in general have "a very high temperature: for instance fowls 106.5° F., Swallows, "112° F. The smaller the birds the higher the temperature. Some "water birds have a temperature as low as 100-102° F.; the "Ostrich's temperature is 98° F."

I am sure my friend Dr. Lovell-Keays will pardon this Editorial reference to his weighty article—we certainly desire and solicit the result of his avicultural experiments and observations for "B.N." for the benefit of his fellow members and aviculture generally.—Ed.].

◆

A Fascinating Bird.

By W. A. Bainbridge.

The Long-tailed Tit: I wonder how many readers of this magazine have kept Long-tailed Tits (*Acredula caudata, Linn.*), and are in consequence in a better position than I am to write this article. Probably many, but never mind; it is not for their benefit I am writing this—far from it.

Then why write, do you ask? Well, here is my one and only excuse, viz.: to introduce to others one of the nicest and tamest of birds one can possibly desire.

For the benefit of those who do not or will not keep British birds in their aviaries I may say that there is a Continental variety of this bird, slightly more expensive it is true, but against this it is a little prettier, as the head is almost white.

I first bought two pairs of the Continental variety from Mr. Frost, turning them straight out of doors; next day I entered the aviary, carrying mealworms with me. Soon a Tit, appeared on the scene and wishing to be polite I held a mealworm up to it. Would you like a mealworm Mr. Tit? Yes, please said he, as to my surprise he flew down, settled on my hand and took it.

Thus encouraged I tried again until all four had eaten their fill. If you had asked me then which were the nicest birds I had, there would and could only have been one answer -- Long-tailed Tits.

Too late I discovered that they had been kept in a warm room, and to my sorrow my four pets died, I at once bought another pair, and this time kept them in a cage and both have lived, taking mealworms from my fingers at once, and proving themselves most delightful pets.

So tame are they in fact, that if you enter the room where their cage is and forget to give them a mealworm they soon remind you, clinging to the wires of their cage and calling their loudest to attract attention; and never in vain do they call, for who can resist a ball of black and white fluff which clings to the wire and stares at you with large black eyes. At first sight you imagine that nothing larger than a pin's head could possibly enter such a tiny little beak, but tiny as it appears you will find that half a mealworm is very soon a thing of the past, you feed the hen, then hubby wants one, and by that time her ladyship is quite ready for another.

You may say, and not without reason, that these birds were tame when I bought them, they were, but that does not alter the fact that they are perfectly easy to tame once they are meated off.

As an example of this I give my experience with the English variety, I was given four pairs, the day that they were caught, of which three pairs are still living. Ten days after they were caught, four out of the six were feeding from my hand through the bars of the cage and so little fear have they that when one was ill I caught it, and tried to open its mouth to feed it, failed, and holding the mealworm in my hand while preparing for a second attempt I felt a tug, and found the mealworm disappearing down the Tit's throat, and two days after capture.

How many people want a pair of birds that are tiny, safe to keep with Waxbills, etc., and which are at the same time perfectly tame to such as these my advice is buy a pair of Long-tailed Tits, and the method of procedure I should advise is as follows:

Buy a pair now and keep them in a medium sized cage through the winter, every now and then give them a mealworm broken in half in your fingers, or if you prefer it in a pair of tweezers, in a few days when you approach you will find them calling to you for food, a few days more and you can put your hand inside the cage and soon will find that they will take them without the bars between you, from that to complete confidence in you is but a step.

When the spring comes round turn them into your aviary; you will find that you are associated in their minds with food and they will soon be down on your hand for food, and if for the first few days they will not do that they will come to the nearest perch and take it from your hand there.

A word of warning, the Tits will see you before you see them, and fly to you, and if you do not enter the aviary with care, they will be down and out, but this is not really serious as they will come for a mealworm held out in one hand and with the other you can easily catch them, two minutes is about the time it took me.

When you have got and found out at last the one bird you have always wanted, do not forget that it was the F.B.C. which brought it to your notice. Pay this debt of gratitude by encouraging new members; remember that the more members there are the more coloured plates can we afford, and that the more coloured plates the more members are we likely to attract, and this will relieve our hard worked Editor whose sole reward for all his labour is the gratitude and thanks which we all must give him.

◆

Blue Budgerigars.

(*Melopsittacus undulatus,* v. *caerulea*).

By O. Millsum.

Since my return to England, I have resolutely kept away from my old love, not that I have entirely dispensed with all my bird-pets, but they have been kept to strictly limited numbers. I have also refrained from reading the various periodicals of the "Fancy" even our interesting *Bird Notes* has been received only to be shelved. I have adopted this attitude, not because I like it, nor do I admit personal weakness, but purely from business reasons do I believe it best to let my passion for bird life lie in abeyance, at least for a time. However, the notice affixed to the outside cover of *Bird Notes* announcing the L.C.B.A. Show tempted me to once again visit that wonderful and fascinating exhibition of avian gems. This and the knowledge that I should meet some of my birdy friends found me once more amongst the Foreign exhibits on Friday, November 28th.

Looking through that wonderful array of foreign birds, the finest collection ever staged under one roof, I was charmed to see three of those beautiful Blue Budgerigars. These exhibits prompted me to ask our esteemed editor and friend if any fancier was really making progress in reproducing this variety. I was sorry to hear but little success had been met with, and, as I should very much like to see this variety greatly increased, I think it worth while recording what, I believe from practical experience to be the only methods to real success. There is really no reason whatever, providing certain rules are carried out, why the Blue Budgerigar should not be bred as freely as the commoner Green and Yellow.

Two conditions are absolutely essential to the successful breeding of these birds:

1.—The birds must not be subject to any powerful light, my contention being, that powerful rays of light reduce the stamina of the birds. It must not be forgotten that their beautiful colour, a rich sky blue, though pure, is not natural, having undoubtedly been produced by selection; therefore, I suggest a semi-darkened indoor aviary or flight, not allowing any direct and powerful rays of light to enter any portions of their enclosure.

2.—Birds must not be allowed to mate until fully two years old. This is a most important item, and has been in the past the greatest cause of non-success. As with the Green variety, these birds will mate when quite young, but it is rarely with success. The young of such birds are anæmic and often infected with rickets, as well, the colour exceedingly poor, more like grey than blue, they do not thrive, and but a very small percentage live to any age. The parent birds are more liable to egg binding,, and when this occurs the chances for recovery are very small.

My advice then, is this, if too impatient for the birds to become fully adult, dispose of the birds. I know, for I speak with experience. I made the same mistake. In the year 1911 I had about 30 of these delightful birds under my care at Everberg, and being anxious to breed them freely, I located them in three large aviaries, each with a large open outdoor flight. I had visions of such a lovely flock by the end of that year. My visions did not, however, materialise. Plenty of eggs and a fair number of young, but I finished up the season with I believe ten, and not a fine youngster among them. These were sold in one lot to a dealer on the Continent. So much for that attempt, but why my failure? I meant to find out. Within a few miles of those aviaries I knew a Belgian fancier with a few of these birds, three pairs, I believe, but was nevertheless having success, breeding good colours and fine robust youngsters, as many as six in one nest. I visited him several times and had a good look round, seeking all the information possible. His birds were flying loose in quite a darkened out-house, the adult birds in one compartment, the young in another. Breeding boxes were permitted in the spring and summer and moved in the early autumn. Hence his success, and he admitted this was the only secret.

If our Budgerigar lovers could only see charming Blues flying about as I have done, the wonderful depth of colour of perfect adults, their size and form, I am sure they would not hesitate to bring these birds to such perfection here. There are no fanciers under the sun to compare with when once they make up their minds to improve any species. I have only to name the Canary as an instance. Will our members take up my suggestion now, and in a few years we shall have Blue Budgerigars that will bring joy to the heart of any bird lover. An additional advantage will be of having established and domesticated a beautiful variety of Foreign birds that breed freely, need little attention, and thrive splendidly in captivity. As a further inducement, I am convinced such a pleasurable venture would also be highly profitable. As is well known, the present prices for these birds are high, and it will take years before they can be bred in such numbers to become common. I should be glad to hear of anyone interested.

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Re Himalayan Siskin.

By Wesley T. Page, F.Z.S., Etc.

The Himalayan Siskin (*Chrysomitris spinoides*): This beautiful species is found throughout the Himalayas, and is a larger and more brightly coloured bird than the European Siskin (*C. spinus*). It is a bird of the woods, but is occasionally found in gardens in small parties. The nesting season is July and August, the nest is cup-shaped, constructed of grass, hair and moss, and is usually placed in the branch of a tree. The eggs are pale green speckled with black and the clutch usually numbers three.

Oates, in his "Fauna of Brit. India" calls it the Himalayan Greenfinch, and puts it in a separate genus, *Hypacanthis spinoides*.

Description. Male. Above more or less greenish olivaceous-brown; forehead variable according to age, black, or black and yellow, or nearly all yellow; crown, nape, ear-coverts and part of cheeks black tinged with green; lores, sides of face, sides of neck, band across back of neck, rump, and the whole of the underparts rich canary-yellow; the upper tail-coverts greenish-brown; tail, two central feathers deep brown, the others more or less yellow; wings dusky-black, greater-coverts tipped with yellow and the quills with a broad patch of yellow on the outer-webs, and tipped and margined with white; beak flesh-colour, dusky at tip; feet brownish flesh-colour; irides brown. Total length 5 inches, tail just under 2.

Female: Similar but colours not so intense, the yellows being paler and upper plumage more greenish, with the forehead blackish-brown.

Mr. Goodchild's characteristic drawing gives an excellent idea of the general colour pattern, and if the darkest parts are taken to represent black tinged with green, medium parts greenish-brown, and the light parts canary yellow, a good general idea of the colouration is gleaned.

This species has been an occupant of English aviaries for the past three years, but has not yet been bred in captivity and there have been several short notes concerning its demeanour in "Bird Notes."

I have included the above as a sort of companion sketch to the note on the Sikhim Siskin, which appears in our report of the L.C.B.A. Show on page 3 of this issue.

◆

Editorial.

The Magazine: In the closing down of one volume and the commencing of another, there is not only the retrospective view, but the prospective as well; the past is done with, but the present and future are with us and before us. We cannot enter upon a fresh period, at least your Editor cannot, without some aspirations not merely to equal but to go "one better" than the past. This is our position as regards the new volume of *Bird Notes* of which this is the first issue; while our desire is to keep up bulk, number of plates, etc., it is not quantity alone that tells—yet, how can we go forward? We think, this must be by *more* taking a personal interest in their Club Journal—*there are more than 75 per cent. of our members who never contribute to its contents*—and sending accounts of their birdrooms, aviaries (and birds) and the many episodes that must occur in them. By becoming more observant of the birds we keep, noting every fact, studying cause and effect—*our observation and its records cannot be too detailed*—it is on these lines that we can go forward and make the matter in our Journal of more permanent interest in the future than in the past. Your Editor certainly hopes that there will be many new contributors during the year and that all the contributors to the past volume will be equally zealous for the present one.

What has been achieved in the past, has only been attained by the generous financial help of many members, far in excess of their annual subscriptions, and even with this assistance we have a relic of the past in the form of a deficit. How can this be best dealt with? By all being indefatigable in gathering in new Members, and by giving your Hon. Treasurer a double income this year, to clear off all incubus, and provide for some go-ahead work in coloured plates, etc., and promptly paying current year's subscriptions, so that he may have funds to punctually meet all claims against us. Surely the position we have attained to (*vide* Roll), and the Journal we issue is worth this effort, both to establish what has been already achieved and to help us forward to a steadily progressive future (*vide* Notices to Members in inset) both as to numbers and influence.

THE FOREIGN BIRD CLUB, as its name indicates, is, so far as exhibition purposes go, limited to FOREIGN species, but there the limit ends, for as Bird-keepers or Aviculturists we are a Society for the purposes of keeping, breeding, and studying ALL SPECIES of birds, and our Journal, "BIRD NOTES," is fully comprehensive to the utmost extent—its pages are open to all species of the world's birds and all appertaining thereto, both as to their life in their native wilds and in captivity.

We are desirous of extending the meetings of members. In the past these have been limited to the Zoo, but on January 17 the first (of a series we hope) meeting at the British Museum will take place, when by the courtesy of the Museum authorities, the skins of the Weaver Group will be on display in the Bird Room. In the spring and summer the meetings at the London Zoo (at other centres too, we hope) will be resumed. The date of the Annual Dinner will be duly announced.

We solicit your help and co-operation in the year's programme, as indicated above, both as to its financial and literary aspect.

◆

British Bird Calendar.

It is urgently requested that Members from all round the coast will note the movements of birds, more especially in the Southern and Eastern Counties, and regularly (28th of each month) send in their notes— **on this the ultimate success and permanent interest of the Calendar will depend—**

MIGRATION NOTES FROM N. UNST LIGHTHOUSE, SHETLAND.

July 8—4 Ravens, 2 Hooded Crows stealing young Kittiwakes and Gulls.

July 12—6 Common Gulls. First young Fulmar.

July 30—Eider Duck and 3 young.

August 9—Common Wren and a few Twites.

August 18—Grey Wagtail, 3 Curlews, and young Black-headed Gulls.

August 21—Grey Wagtail, numerous Rock and Meadow Pipits, 1 Wren. First young Fulmar left his nest.

August 28—1 Whimbrel.

August 29—Numerous Pipits and Wheatears, 1 Puffin at lantern.

August 31—2 Falcons, 2 Herons, Wheatear, Wagtail and Meadow Pipit.

September 1—2 Turnstones, and a few Puffins still to be seen.

September 4—3 Grey Wagtails, Meadow Pipit, and a great number of Petrels at lantern.

September 10—First Glaucous Gull and 1 Grey Goose.

September 11—2 Wheatears and a few Terns.

September 12—First Snow Bunting.

September 26—Snow Bunting and Wheatears at lantern.

September 27—Starlings at lantern, 1 Heron seen.

September 28—Merlin Hawk and numerous Meadow Pipits.

September 29—Redwing and Snow Buntings at lantern.

September 30—20 Turnstones.

October 1—Brambling, Redwing, and Wheatear.

October 6—13 Eider Ducks.

October 10—Great Skua and 1 Golden-crested Wren.

October 11—1 Robin.

October 13—Large flocks of Eider Ducks, 1 Blackbird, 2 Redwing. Last Great Skua seen.

October 20—1 Chaffinch.

October 23—Fieldfare, Redwing and Starlings, and 16 Bernicle Geese: also seen on 24th.

October 27—Rush of Fieldfares, Redwings, Mealy Redpolls, 2 Robins, Snow Buntings, Blackbirds and Starlings. A few killed at lantern.

November 9—1 Redstart.

November 20—4 Chaffinches, and 1 Woodcock.

Per. D.E.P., Southsea, 29/xii/'13.

December 6—Richard's Pipit captured by Mr. C. Sykes at Musselburgh, making its third appearance on the mainland of Scotland (see Correspondence section).

M.R.T., Inveresk, 5/1/'14.

December 7—Saw a lovely Black Redstart foraging amongst seaweed. O.M., Margate, 15/xii.,/'13.

December 28—I caught a cock Waxwing here to-day, it was attracted to my aviary by six of the same species which I obtained from Rotterdam. It is a fine, and was certainly not an escaped bird; it would not leave the aviary and was easily caught. R.S., 31/xii.,/'13.

December 29—17 Wild Geese, 5 Herring Gulls and 1 Lesser-backed Gull passed over. B.H., Harrogate, 1/i.,/'14.

January 1, 1914—Saw a pair of Snipe in the Marsh this morning. B.H., Harrogate, 1/i.,/'14.

December—Mealy Redpolls and Siskins appear to be much more numerous in this neighbourhood than usual; also Lesser Redpolls, but the latter are usually with us in fair numbers.
J.W., New Milton, Hants., 16/xii./'13.

Correspondence

RESULTS—1913.

Sir,—You ask for breeding results for 1913, I append the following:

Built but did not lay:
- Blue-winged Sivas.
- Blue-tits.

Laid but did not hatch:
- Painted Quail.
- Golden-fronted Fruitsuckers (these have previously on three occasions reared young to one, six, and twelve days).
- Firefinches.

Reared Young:
- Green Avadavats (2).
- American Robin (1).
- Orange-headed Ground Thrush (1).
- Blue-breasted Waxbills (2).
- Cordon Bleu (2).
- Blue-breasted Waxbill × Cordon Hen (3).
- Gouldian Finches (3).
- Jacarini (2).
- Zebra Finches—2 pairs (24).

In each case there was only one pair of parent birds except where stated (the Zebra Finches). The numbers in parenthesis indicates the number of young reared. M. AMSLER.

HYBRID QUAIL.

Sir,—I am sorry I canot give you full particulars of their plumage, as I unfortunately lost both the parents and young from some unknown sickness. Strange to say the Black-breasted Mexican Quail in same aviary and the Californian Quail in adjoining aviaries were not affected.

The young Hybrid Quail were quite full grown when I lost them, and at that time were exactly like their mother, the chestnut markings on breast and throat not having developed.

I still have three of last year's (1912) Hybrids left, in other aviaries and hope to breed from these next season.

Westbury, Wilts., 1/12/'13 Wm. SHORE BAILY.

HYBRID MANNIKINS (?)

Sir,—My supposed Tri-colour Mannikin × Bengalese Hybrids are still going strong; they left the nest over a fortnight ago, and are fed by both parents, as I take them to be, viz., the Tri-colour Mannikin and the Bengalese. I have not as yet seen them crack seed for themselves. W. A. BAINBRIDGE.

AN EARLY BIRD.

Sir,—A remarkable case of early nesting was reported to me on January 8th. At Calwich, Ashbourne, Derbyshire, a farm bailiff, while engaged in cutting a hay stack on January 6th, found a nest with four eggs, which he believed was a Wagtail's. When found, the eggs were quite warm and on breaking one it was found to contain a chick fully formed. As the whole stack was being cut up he took the nest and eggs and at my request brought them to me. They were those of the Pied Wagtail and I am forwarding the nest and eggs on to our esteemed Editor. Is this a record for the species? J. H. HENSTOCK, Ashbourne, 12/1/'14.

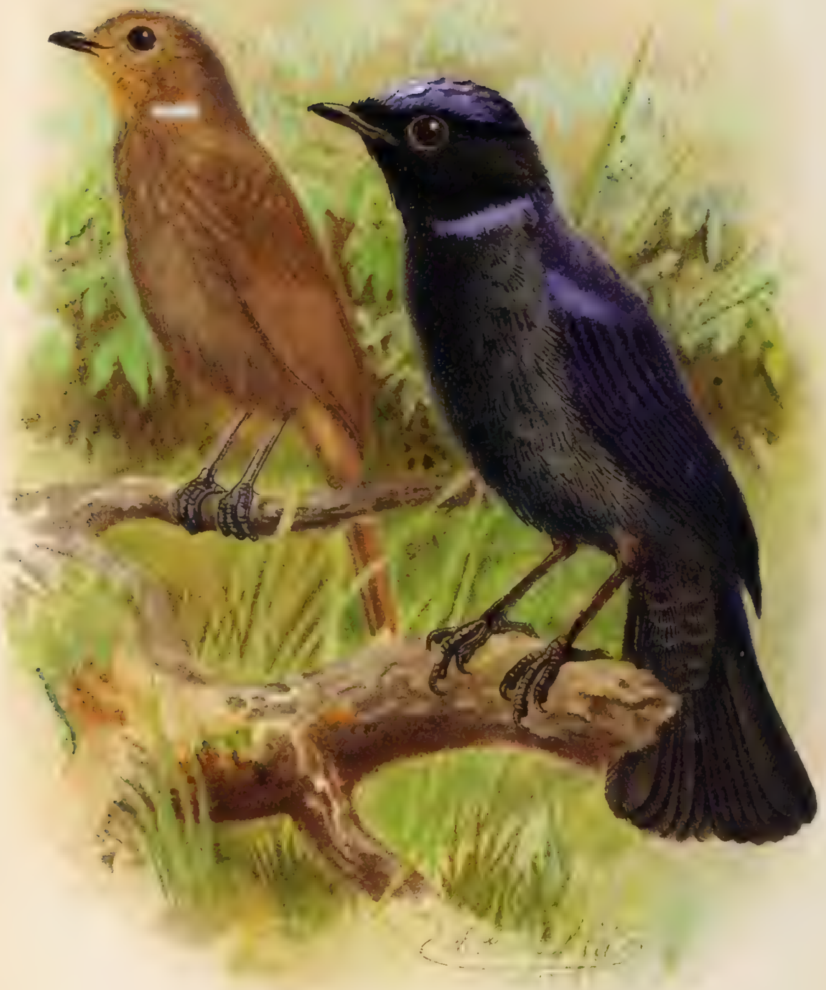
A RARE VISITOR.

Sir,—To Mr. C. Sykes, of Musselburgh, one of our members, belongs the credit of recording the appearance in Scotland of an exceptionally rare visitor from the far East, viz.: Richard's Pipit (*Anthus richardi*). The bird was in an injured condition, and actually crept into the doorway of the house occupied by him, on the night of 6th December last. Richard's Pipit has been known to ornithologists for over one hundred years, during which time occasional visits to England have been recorded; but this is only the third known instance of the appearance of the bird on the mainland of Scotland. The home of the species is eastern Siberia and north-west China, whence it migrates south in autumn to India, and south-eastern Asia. The little travelworn bird unfortunately succumbed to its injuries, and Mr. Sykes was thus robbed of the opportunity of adding to his laurels at the Palace! The specimen has been presented to the Royal Scottish Museum of Science and Art in Edinburgh for preservation.

M. R. TOMLINSON, Inveresk, 7/1/'14.

Post Mortem Reports.

These Reports will be found on page 18 of Inset (Pink paper).



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BIRD NOTES:

— THE —

JOURNAL OF THE FOREIGN BIRD CLUB

The Large Niltava.

(*Niltava grandis*).

By WESLEY T. PAGE, F.Z.S., etc.

This fine species, one of a trio of gorgeously plumaged Himalayan Flycatchers, was introduced to English aviculture in March 1912 by our member, Major G. A. Perreau, when he brought over a pair among many other rare species of Indian birds. The male, a beautiful bird in good feather, passed at once into the hands of its present possesser, Mr. A. Ezra, and the female was presented to the London Zoo, but I understand that it is about to pass to Mr. Ezra, so the two birds will be re-united very shortly.

I had abundant opportunity for observing the species before it passed into Mr. Ezra's possession, and they were indeed a charming pair of birds, even within the limits of its travelling cage, and only the day following all the hardships of the journeying by sea and land, the pleasing song of the male was continually heard and he was showing off (displaying) to his mate several times in the course of the day, and I fear I was very envious of his purchaser, though other rare species were coming my way; but, although knowing in Mr. Ezra's hands the bird would spend a very happy existence, with its every need anticipated, I yet regretted the pair were not going to an aviculturist with natural aviaries where they would have had an opportunity to go to nest and reproduce their kind. Mr. Ezra's success in keeping the bird was evident to all who saw it at the recent L.C.B.A. Show, where its exquisite plumage, faultless condition, and bold and fearless demeanour charmed all beholders. Before proceeding further I must introduce here a few notes Mr. Ezra has kindly sent of his experiences with the species.

THE GREAT NILTAVA.

"I have had this beautifully coloured bird for ten months. He seems quite hardy and easy to keep, and I have not had any difficulty whatever in keeping him in perfect health. He is fed on Insectile Mixture, besides a lot of grapes and apple cut up, also half a dozen mealworms per day. He sings all day long, and although not a very loud song it is quite a pleasant one. When showing off he is lovely; drawing his neck up to its full length and opening out his tail like a huge fan. He will never miss his bath a single morning, and is not happy till he gets it. I am lucky in possessing such a charming pet."

A. EZRA.

Mr. Goodchild's studies were taken from the living birds, the result of which is the frontispiece of this issue, which renders further enlargement unnecessary save to give description and wild habits.

DESCRIPTION: *Adult Male*—Upper plumage dark purplish-blue; forehead, lores, cheeks, and ear-coverts velvety-black: crown, patch on each side of neck, shoulders, and upper tail-coverts glistening ultramarine suffused with cobalt; tail, central feathers purplish-blue, others brown on inner webs and blue on outer; beneath: chin, throat, and breast velvety black; abdomen black with purplish sheen; ventral region and under tail-coverts dark blackish-ashy tinged with fulvous; underside of wings and tail black; bill, black; irides dark brown; legs and feet black tinged with plumbeous. Total length $8\frac{3}{4}$ inches, tail $3\frac{3}{4}$.

Female—Mostly olive-brown; crown and nape ashy-brown, washed with rufous on the back and rump; the wings and tail dark brown, with the outer webs strongly suffused with rufous; forehead, lores, eye region, ear-coverts, and cheeks fulvous with pale shafts; the feathers of the chin, throat and breast have also pale shafts and the centre of abdomen is strongly suffused with ashy-brown; a bright blue patch adorns each side of the neck; beak dark brown; irides brown; legs and feet lightish brown.

Young—"The young nestling is dark brown streaked with fulvous; wings and tail as in the female" (W. Oates—"Fauna of Brit. India) "The young male is blackish with dark ferruginous spots; and is very Meruline in appearance" (T. C. Jerdon—"Birds of India.")

It is found in the Himalayas from Nepal to Assam at an altitude of from 4,000 to 7,000 feet, the Kasi and Naga Hills, Manipur, Muleyit Mountains to Tenasserim. While having the general habits of the typical Flycatchers, the Niltavas spend more time on the ground than is usual with such, and they vary their insect *menu*, at certain periods, with berries and seeds. According to Jerdon it is more shy and retiring in its habits than the Rufous-bellied Niltava (N. *sundara*), favouring thick shady glens in the vicinity of water, gathering much of its insect prey from the ground. The nesting period is from April to June, the nest is loosely constructed of moss and mostly placed in the cleft of a rock or a tree-trunk. The eggs are pale buff, spotted with pale red. Jerdon describes the nest as loosely constructed of moss, and when placed in the cleft of a rock, the shape is accommodated to it, having seen the nest shaped like a parallelogram, long, quite flat on the sides, and the two ends slightly rounded.

There are two other Niltavas which range the Himalayas, viz., the Rufous-bellied (*N. sundara*) well known to English aviculture, and of which our member Mr. R. S. de Q. Quincey, possesses a true pair, also brought over by Major Perreau. This species differs from *grandis* in its smaller size (6¼ in.), and the rich rufous-chestnut of its lower plumage; and the small (*N. macgrigoriae*) which differs in its still smaller size (5 in.), violet-blue neck and breast, pale ashy abdomen and white ventral region. All three resemble each other greatly in general demeanour and characteristics.

Perhaps Mr. de Q. Quincey will kindly oblige with an account of his pair, which have enjoyed the comparative freedom of a roomy garden aviary during 1912.

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Some Punjab River Birds.

By H. Whistler, I.P., M.B.O.U.

Of all the fascinating phases of bird life that await the observation of the Naturalist in India, one of the most striking is that which consists of the feathered population of our Punjab rivers. And this is, I think, because one meets commonly on them many species of birds belonging to types which are as a rule less familiar to the Naturalist in England; unless he happens to live in the comparatively few parts suitable for such birds as Terns, Plovers, and Sandpipers.

These stray notes are collected from experience gained on two of the Punjab rivers—namely, the Sutlej at Phillaur and Ferozepore, and the Jhelum at Jhelum, at which three places, although many miles apart, the ground and the birds observed were more or less similar.

It may be well to start with a brief description of the rivers at these points, where they are most unlike the waterways of England. The Punjab river bed is very wide, generally somewhere about a mile in breadth more or less, and in this bed the river frequently changes its course from year to year, never occupying the whole area, even when in full flood from the melting snows and rains of the Himalayas. The difference in volume of the water between the full river in flood and the mere stream of the cold weather is very great; in one case the river may be a rushing torrent half a mile wide; in the other a few separate channels, easily to be crossed by wading. And even when the river keeps to one course the changes in the sandbanks and the direction of the currents are most bewildering.

The dry land in the river bed may be divided roughly into two types; firstly there is the portion nearly connected with the river and usually under water at some time of the year. This appears either as sand-banks in the middle of the various water channels or as a sand area bordering on the water; in either case it consists of dry loose sand, often with a hard upper crust due to deposits of mud, covered with a varying amount of tamarisk shoots or scrub and a few other plants. This area is chosen as the nesting place of hundreds of Terns and Plovers

The second type of land is that which has not been submerged by the river for a number of years. It consists of sandy soil, which if not cultivated, as it often is, in *patches*, is usually covered with a more or less thick grass jungle, which becomes grazed or cut down as the season passes. Such ground is the favourite nesting one of various Larks, Pipits, and Chats, and more especially of the Streaked Wren Warbler, *Prinia lepida*.

How well I remember my first introduction to the nesting possibilities of such a river-bed, when I had only been out in India a month or two. It was at the end of March, and wandering along the sands I saw some Great Stone Plovers—a relative of the Norfolk Plover. Meeting a native Shikari I pointed the birds out to him, and promised "bukhshesh" if he found their nest and shewed it to me; but it appeared a hopeless quest amongst all those acres of level sand. The man agreed, and turned up a day or two later with the information that he had found the nest: so I agreed to meet him at the spot later on. It so chanced that I was first at the tryst, and espied the Sand Plover running along the sand as if leaving her nest: so I sat down to watch under the impression that the nest must be quite close by; but although the birds were present they showed no intention of returning to their eggs while an intruder was anywhere about. So tiring of the trial of patience I went to the spot where the bird had been running, and tried to track her on a heel scent. Meanwhile Shikari arrived and pointed out the nesting site. The tracks did indeed come from the nest, which was some way off, in fact behind me when I had first seen the bird, which must have been running for some time before she had caught my eye—a sandy-coloured bird on a background of sand. There lay the two handsome eggs in a hollow where the sand had been scooped out under the lee of a sprig of tamarisk, without any attempt at a nest. The man said that he had found the nest without reference to the birds by following their footmarks on the sand, and that after one or two false trails he had come on the eggs.

With the experience gained from this pair of birds I found many nests all by tracking; one has only to visit a sandbank where a pair is nesting, and walk across it, keeping a sharp look out some hundred yards ahead, until one or both birds is seen stealing away, continually stopping to watch the invader; then if one has seen the birds before they have taken flight it is usually easy to carry the trail back either to the eggs, or to an area covered with a network of tracks (if there has been no wind) where the eggs may be searched for and found; on occasion I have found nestlings only a day or two old, and once the two eggs were found to be sprung, when I took them and hatched out the chicks but failed to rear them. When one is in the close neighbourhood of the nest the parents fly round whistling in a most agitated manner.

The Great Stone Plover (*Esacus recurvirostris,* Cuv.) is a larger bird—20ins. as against 16ins. in length—with a more massive bill than the Norfolk Plover (*Œdicnemus scolopax,* s.g. Gnd.)—a race of which is also found in India. Whereas the latter bird is an inhabitant of dry open stony country, the former haunts the sandy margins of rivers and the sea.

The plumage is roughly speaking light ashy-brown above, with white underparts and a white band on the primaries; there are some black markings on the sides of the head, and a conspicuous blackish-brown band, followed by a narrow whitish one on the smaller wing-coverts; irides bright yellow.

The eggs are two in number and are laid on the sand without any attempt at nidification, save that the hollow in which they lie is sometimes if not always made by the bird. They are stone coloured, with dark blotches and secondary purplish markings. The earliest and latest dates on which I have found eggs are respectively the 31st March and the 9th May. The measurements of 8 eggs give the following result :

Length from 53 to 58.5 mms.
Breadth from 41 to 43.3 mms.
Average dimensions 56.3 x 42 mms.

The nestling is clothed with thick ashy-grey down above, tinged with sandy, and largely tipped with black; there are some black marks on the head and back; lower parts greyish-white.

The next species with whose nesting I became acquainted was the Little Indian Pratincole or Swallow Plover (*Glareola lactea*, Temm.).

One evening, trudging across the stretch of sand whence had come the Stone-Plovers' eggs, I saw a number of tiny tracks on the sand by my feet and hard by two eggs lying in an artificial hollow by a Tamarisk shoot; they were rather curious little eggs, unlike anything that I had seen before, but instinct told me that they must be Pratincoles, for there were numbers of the birds about, and their whole behaviour pointed to the probability of their being about to nest. The conjecture was verified in a few days when I came across whole colonies of the Pratincoles' nests, often in company with those of Terns.

The Little Indian Pratincole (*Glareola lactea*, Temm.) is one of the prettiest of our river birds, and is peculiar to India; in the northern Punjab it is apparently only a summer visitor from the middle of March to the second week in October, and at that time occurs in enormous numbers. I

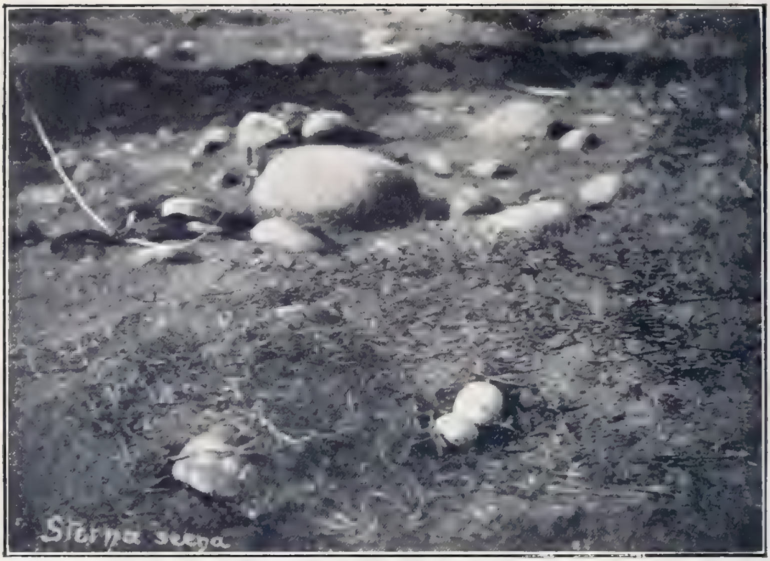
Sterna seena

Photo H. Whistler
Nest and eggs of Indian River Tern.

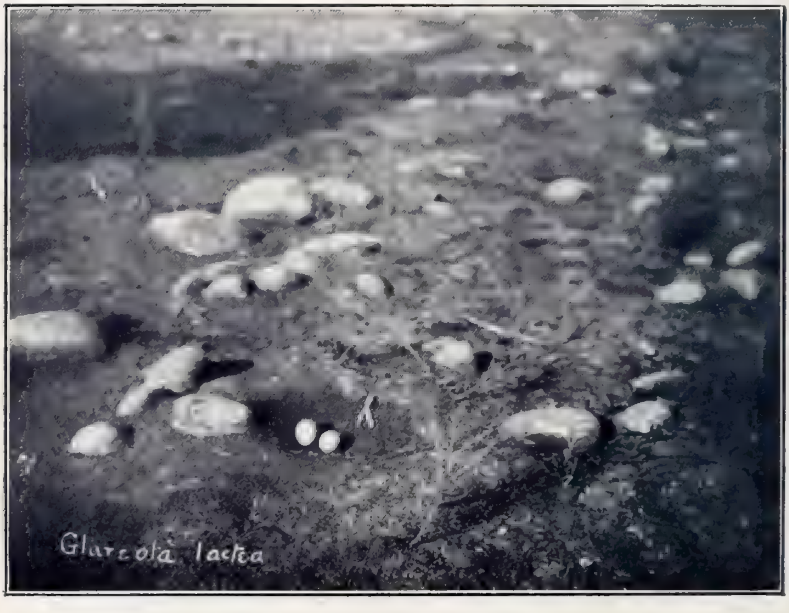
Glareola lactea

Photo H. Whistler
Nest and eggs of Little Indian Pratincole.

first met with the species at Phillaur about the middle of March, when numbers used to arrive every evening from the river at a large jheel, where they skimmed about close to the surface of the water in a very swallow-like manner until dark. At Jhelum the same propensity to flighting in the evening, was noticeable, for until after dark great numbers used to pass up the river, flying sometimes low and settling on the sand-banks, and sometimes travelling about a gun-shot above the ground; on one occasion I saw several very large flocks, flying at a great height in the air. While flying, a peculiar rather peevish "churring" note is uttered.

An interesting characteristic of the bird is its skill in feigning to be wounded or crippled; one has only to enter the boundaries of a large nesting colony to obtain an experience to be remembered. Clouds of birds rise and fly all around the intruder, or skim over the surrounding water, uttering an incessant "churr," while on every side within a distance of a few yards numbers of birds flap and struggle on the ground, in every posture of wounded agony, but a few steps taken in its direction is enough to cure the most desperately wounded bird, which joins its comrades in the air, doubtless rejoicing at the success with which the intruder has been lured from its nest. But the stratagem, while benefitting the individual can be of little use to the colony in general, for nests are so thick that to decoy an intruder from one danger zone is only to lure him to another.

The clutch usually consists of two eggs, and three are not uncommon, but of about a hundred nests which I have examined, only one contained four eggs. The nest is a hollow scooped in the sand by the birds, on occasion neatly and carefully fashioned, about half being absolutely in the open and the rest against a sprig of tamarisk or other sand-growing plant. On one occasion I found a nest well sheltered between two stones.

The usual site of a colony is on fine loose dry sand, but places where such sand is overlaid by a broken crust of dry mud deposit are also favoured: the colony in which the accompanying photo was taken is the only one that I have found placed among stones.

A very large percentage of nests are washed away by the erosion or flooding of sand-banks, which seems to form the only check to the excessive increase of the species.

The eggs are somewhat blunter and less pyriform than those of the true Plovers, and are very variable, having a ground of either stone-colour, buff, or pale greenish grey, sparingly speckled and spotted, and very occasionally streaked with brown and pale lilac. The average of 44 eggs measured is 26.8 × 20.9 mms., the length varying from 24.7 to 29 mms., and the breadth from 19 to 21.9 mms. They are laid in April and May.

Both sexes are alike and are thus described by Blanford "Fauna of British India—Birds," Vol. IV., p. 216:—

> Upper plumage throughout pale sandy grey; forehead brown, and a band from the eye along the lower edge of the lores black; primary coverts and primary blackish, all the primaries except the first two with part of the inner web white, and some of the latter primaries with part of the edge of the outer web also white; secondaries white, with blackish-brown ends that diminish in breadth on the inner quills; upper tail coverts white; tail white at base, blackish towards the end, the black ends much longer on the middle rectrices; the tips, except on the outer pair of tail feathers pale brown and white; chin white; throat foreneck, and upper breast more or less smoky brown tinged with rufous, passing into white on the lower breast; abdomen and under tail coverts white; edge of wing whitish; wing lining and auxilliaries black.
>
> Terminal half of bill black, basal half red, changing to yellowish brown at the gape; irides dark brown; feet, legs, and claws, black.
>
> *Length* 6.5 ins.; *wing* 5.75 ins.; *bill* from gape .75 ins.

To this description I have to add that there is a white spot behind the eye, and a fringe of white feathers on the eyelids, save in front where these feathers are black.

The nestling has the skin dark plumbeous, covered with down as follows: Upper parts dirty white tinged with yellowish, and speckled with dark grey—making a sort of pepper-and-salt mixture; underparts, white. *Bill* dark plumbeous grey, blackish at tip; eggtooth white. *Feet*, dark plumbeous grey. *Iris,* dark brown.

In the juvenile plumage the upper parts throughout are slightly darker than in the adult, being more sooty in tint, the feathers narrowly edged with pale brown giving a squamated appearance—this difference being most marked on the head and nape. The brown forehead mark and the black-band on the lores wanting; the feathers round the eyelids are cream instead of white; the throat and upper breast are marked with wedge-shaped black spots.

The flight-feathers and rectrices are moulted when the first winter plumage is assumed. As far as my observations go (but I am not yet absolutely certain) the adult plumage is assumed at the first spring moult, and the first winter plumage differs from the juvenile garb in that the upper parts approximate more to those of the adult, but the lores, forehead, and eyelids remain as before; the spots on the throat and breast become very small and few in number. (The departure of the species for its winter quarters has prevented me making certain of this phase).

Nesting in company with the Pratincoles are often to be found numbers of Indian River Terns (*Sterna seena*), and the Indian Scissor-bill or Skimmer (*Rhynchops albicollis*); and when this is the case the invasion of the colony is an affair productive of a great deal of noise and excitement, for the two latter species usually advance to meet the intruder and fly round and about all the time he is there, uttering their harsh cries ,and often mounting to a great height in the air, so as to form a kind of background to the undercurrent of skimming, fluttering, churring, Pratincoles.

The first occasion that I met with River Terns and Scissor-bills nesting together recalls an exciting experience. The colony was a large one, and the nests were more or less intermingled, so it was a problem how the eggs were to be assigned to their real owners, for the eggs of both species were previously unknown to me, and the birds rose from their nests at a distance. So I enlisted the services of a couple of brother officers with a view to making a night attack, in the hopes of catching the birds asleep on their nests. After dark we set forth with a lantern to visit the sand-bank. Since this was an island and there were no boats handy it meant wading; the channel was a broad one, and the water fairly deep and very cold, as the Himalayan snows were beginning to melt. As promoter of the expedition I had the dubous honour of leading—it was a somewhat risky job—with a rushing current nearly up to one's waist, a pitch black night with the light of a single lantern lighting up the immediate surface of the waters ,and total uncertainty as to when I should fall into one of the deeper holes in the river bed;

and at the back of my mind was a lurking thought of crocodiles, although the few that are to be found in that portion of the river are only of the fish-eating variety.

The expedition was not a success, since the birds rose as soon as the lantern gleams fell on them, leaving only a vague memory of white wings; so none were identified, and we had to essay again the passage perilous with empty hands.

However, next day I returned alone and by dint of careful watching identified several clutches of eggs, with the result of ascertaining that as a rule the eggs of Skimmers and Terns can be separated without the presence of the parents. I also noticed a difference in the demeanour of the two species at their nests, for the skimmer is much the less shy at returning to its eggs, and it also feigns to be wounded, a proceeding that I have never seen on the part of the Tern.

The Indian River Tern (*Sterna seena*, Sykes), is a common resident on these rivers, but although the species is present all the year round, it is probable that individuals move about a good deal. Odd birds visit every little pond and even flooded fields miles away from any river, but in this respect it is inferior to *Sterna melanogaster*.

The plumage is thus described in Fauna of British India, Birds, Vol. IV., p. 315:—

> The whole head to considerably below the eyes and including the nape black glossed with dark green, a white spot under each eye; rest of upper parts French grey, paling to pearl grey on the rump and tail; chin and a streak on each cheek bordering the black cap, together with the under tail coverts, white; remainder of lower surface, inclusive of wing lining, delicate pale grey.
>
> After the moult, which does not occur until about December, the forehead is white and the crown dull grey, then black streaks appear and the black cap is generally assumed by February. Young birds have the feathers of the upper parts dull grey, with an inner brown and an outer buff margin.
>
> *Bill* bright deep yellow; *irides* brown; *legs* red.
>
> *Length* 15 to 18 ins.; *wing* 11 ins.; *bill* from gape 2.3 ins.

I have come across the nestling but unfortunately omitted to take a description of it.

The nest is a hollow in the sand scooped out by the parent birds, and often well-banked up round the sides. I have not found any attempt at using materials, except that one nest had bits of straw in the sides, and another small pebbles of dry earth round the rim but in both cases the presence of these objects, struck me as accidental. Small pellets of fish-bones are sometimes present.

The eggs are of the typical *Sterna* type, the ground colour varying from greenish grey to buff, spotted and blotched with dark brown and pale inky purplish. They are laid in April and May.

The measurement of 25 eggs yield the following results:

Length from 39.7 to 44.7 mms.
Breadth from 29.1 to 32.5 mms.
Average dimensions 42.5 x 31.1 mms.

(*To be continued*).

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Breeding Results in My Aviaries (France).

BY E. GODRY.

According to promise I am sending you the following record of results in my aviaries during the year 1913.

Young birds fully reared :—

7 Bleeding-heart Pigeons (*Phlogoenas cruentata*), from two pairs.
3 Indian Green Doves (*Chalcophaps chrysochlora*).
5 Australian Crested Pigeons (*Ocyphaps lophotes*), from two pairs, but they have successfully incubated some eggs and fully reared the young of Bleeding-heart Pigeons.
3 Zebra Doves (*Geopelia striata*).
4 Rosella Parrakeets (*Platycercus eximius*), the large red species imported from Tasmania.
5 Cockateels (*Calopsittacus novae-hollandiae*).
25 Yellow Budgerigars (*Melopsittacus undulatus, v. luteus*).
16 Green-Blue Budgerigars: from four ♂ Blue Budgerigars mated with three ♀ Green, and one ♀ pale Yellow. The young are very nice shapely birds, longer and much more elegant in shape than the ordinary form, They are all of the same shade of colour, a beautiful light green with blue reflex.
7 White Java Sparrows (*Munia oryzivora v. alba*).
2 Black-headed Siskins (*Chrysomitris icterica*).
6 Ruficauda and Diamond Finches.

Blue Budgerigars (*Melopsittacus undulatus* v. *caeruleus*). I regret to have to record failure with this lovely variety, I started with four pairs and lost all the hens from egg-binding, and as I could not get other hens I have mated the cocks with Green and Yellow hens as already stated. I think, as Mr. Millsum says in January *Bird Notes,* that it is wrong to mate the hens before they are two years old; but one of my hens was not mated ,and there were no nest receptacles of any kind in the small aviary she occupied, but she died of egg-binding like the others.

Bronze-winged Pigeons (*Phaps chalcoptera*): I have had no success with this species, though they have nested and hatched out young, but these have been killed in the nest by mice perforating their breasts during the night.

Similar failure has attended my pairs of Blue-Bonnet Parrakeets (*Psephotus haema'orrhous*), and Black-checked Lovebirds (*Agapornis nigrigenis*); but they are very young birds.

Diamond Doves (*Geopelia cuneata*). Of this species I have two pairs, but all their eggs were infertile, yet I have seen them mating frequently. As I have reared many young ones in past years, I think this failure points to the necessity of introduction of new blood to my stock.

Bleeding-heart Pigeons (*Phlogoenas cruentata*). I have two pairs, and between April and October they laid a good number of eggs, but they would not incubate more than four to seven days and many eggs have been found cold and lost for incubation. Some eggs were given to the Australian Crested Pigeons to incubate, etc., with success.

Red-crested Cardinals (*Paroaria cucullata*). My pair proved so pugnacious that I had to remove them from the aviary, thus taking away their opportunity of nesting.

White Java Sparrows (*Munia oryzivora* v. *alba*): These also had to be removed because of their pugnacity, but they nested and reared young in their small cage, the nest receptacle being a very small barrel.

Virginian Cardinals (*Cardinalis cardinalis*). I lost the hen bird and was unable to get another to my great disappointment. Hens of this species appear to have been very scarce in France and also in England during the past year.

A warning: I lost a beautiful pair of Red-rumped Parrakeets through putting perches of Acacia wood in their aviary. I am convinced this wood is very poisonous for them, as after eating it they were dead in a very short time.

Yellow-winged Sugarbirds (*Coereba cyanea*): I bought a pair of these lovely birds in the spring and was very pleased with them, but they died during my absence from home, owing to my servant not fully ministering to their needs.

MACAWS AND COCKATOOS.

I have a splendid pair of Macaws; a Red and Blue (*Ara maco*) cock, and a Blue and Yellow (*A. ararauna*) hen. They are always attempting to nest, but destroy every log and barrel given them in a few days I am not hopeful of success with them.

Leadbeater's Cockatoo (*Cacatua leadbeateri*): I have also a really superb pair of this species, procured from a member of F.B.C. They are constantly mating, and have been playing at nesting since February of last year, but like the Macaws they rapidly destroy every log and barrel I give them, evidently with much pleasure. They are great carpenters and their small white beaks are very powerful, cutting through very strong wire netting, specially made for large Parrots, without difficulty! A pair of Rose-breasted Cockatoos (*Cacatua roseicapilla*) are in the same case, one cannot keep either log or barrel in the aviary--two eggs have been deposited on the aviary floor.

Thus it is not by any means all success ! ! !

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Starting an Aviary.

By Rev. R. E. P. Gorringe.

My excuse for writing an article must be the Editorial note in the January issue of our Magazine. And even then I doubt his letting my modest attempt appear, but if unsuitable, there is always the W.P.B. for it and other garbage of this kind.

I thought, perhaps, my first attempts might be of some interest to other beginners. Although I have been a member of the F.B.C. for over eleven years, and at one time was one of "The Council," it was not until last spring that I possessed an aviary. The previous autumn I had selected a site, a well protected sunny spot; I planted a few box bushes and other shrubs upon it, and was fortunate enough to have an old stump of a quince tree, growing on the spot, which had been cut down two years previously and had sprouted out;

some wild raspberry canes were also growing there. The area of this site was 20ft. by 18ft.

Early in the spring (1913) I erected my aviary. I had a house built, four feet wide, the whole width of the back, which is 20ft.; this has a span roof, which rises about four feet above the top of the flight, and was match-boarded within and thatched without; an open doorway was left in the middle of the front of this house to allow the birds free ingress and egress at will. The open flight was seven feet high and looked quite an imposing place when finished. I then wrote to our Editor asking his advice re birds; and he kindly sent me a list of "Freely Imported Species" suitable for such an aviary, also indicating the accommodation capacity of it and the species most likely to live together in amity.

Like most novices I was most anxious to start, and on April 14th I put in a pair of Zebra Finches and two pairs of Canaries (Norwich Crests), that had been previously kept in a cold room; I presume I should have been rightly served had I found six corpses the next day, but I did not. Two days later I put in another pair of Zebra Finches, which I procured from one of our members; and here permit me to say that I think Zebra Finches are really my favourites; they are always so bright and jolly, and such regular little busybodies. Then I procured pairs of White-headed Mannikins (not particularly interesting these), and Spice Finches (the song of the latter is very comic). Within a week both pairs of Zebra Finches and one pair of Canaries were nesting, and I increased my stock with pairs of Black-headed Mannikins and Red-billed Weavers. The latter I find both interesting and amusing—the cock is always building, while the hen strolls is now and again to inspect what he is doing, and mostly condemns it, so that he has to start afresh.

Thus far I had made my purchases from amateurs, but I now began to try dealers, and have found that there are dealers and dealers, as I expect most have done, however, they say it is a good thing to buy your own experience.

My first transaction was not a happy one, I bought in one lot pairs of Grey Java Sparrows, Cutthroats, Grey Waxbills, Silverbills, Grey and Green Singingfinches, Bronze Mannikins, Combasous, and Green Avadavats—these were all in a miserable condition on arrival, and several died within a few days; the marvel is that any of them survived. From another source I obtained pairs of Orange and Grey Waxbills, and Hartz Mountain Canaries.

Now came a rather amusing experience with a lady, not a member of F.B.C., but as I discovered later, a sort of "amateur-dealer." I had ordered one pair each of St. Helena and Orange-cheeked Waxbills, Red Avadavats and Bronze Mannikins. On arrival the box contained: 1 pair Orange-cheeks, 1 live and 1 dead Grey Waxbill, 1 Bronze Mannikin and 1 Combasou. I at once wrote and asked about the Avadavats and the Combasou. I got a reply to the effect that the Combasou was Mrs. Bronze-wing and that the Avadavats had been packed, but must have escaped when the railway-clerk was checking the birds, but it was a trifling matter, etc., and another pair should be sent—needless to say I am still waiting for those Avadavats.

My stock was soon further increased by two pairs each of Golden-breasted Waxbills, Cordon Bleus, and Bengalese; also pairs of Red Avadavats, Black-headed Mannikins (the others had died), Magpie and Tricolour Mannikins, Firefinches, Paradise Whydahs; Yellow, Napoleon and Grenadier Weavers, Green Avadavats, and Saffron Finches. Thus was July ushered in and I decided I must not put in any more till next spring. I have had some losses, of course; both pairs of Bengalese died almost at once, and the hen Firefinch enjoyed but a very short life, but the cock came into colour, yet died with the advent of cold weather (I expect he ought not to have been left out in an unheated aviary). The Paradise Whydah came into colour, and was a great joy, as also was the Grenadier Weaver. The Grenadier was the only Weaver that came into colour, though I am sure I have cocks of the other two species

There have been a few other deaths during the winter, but the bulk of the birds are still thriving, although we are experiencing bitter weather, and severe frosts, and there is no artificial heat in the aviary. I may add that Dorset is my county.

Nesting results have not been very encouraging,* although there was plenty of cover (my friends say too much to see the birds properly), the net result being 4 young Zebra Finches (all hens), and 2 Canaries (hens). Red-billed Weavers completed a nest in October and the hen laid four beautiful bright blue eggs, but unfortunately dropped them all on the ground. Red Avadavats built a nest in a box bush in late October and laid a clutch of eggs, but did not hatch out, owing, I think, to the intervention of some very wet weather. Many other pairs raised my hopes, but there was no fulfilment. If I am fortunate enough to bring them through the winter, I hope to have better luck another season.

I will conclude this rambling yarn by once more thanking Mr. Page for his kind advice as to how to feed and generally treat them.

*[Nesting results would be materially affected by the continual introduction of fresh birds during the nesting season.—Ed.].

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Birds Bred at Poltimore Park Aviaries, 1913

By Lord Poltimore.

(*Continued from page* 20).

Red-billed Weavers (*Quelea quelea*). The nest was found on October 9th in a bamboo, about 6 feet from the ground, and the same bush contains other Weavers' nests (15).

The nest was shaped somewhat oval, with the hole at one side near the top, which over-hung rather, so it was almost impossible to find out the number of eggs without disturbing the birds.

The female started sitting on October 10th, and we believe the young were hatched by the 24th, as the parent birds were seen busily feeding. On November 12th three strong young birds left the nest. Their colour was like the female, showing yellow on the flights, but no yellow was noticed on the tail feathers.

Two of the young are still alive—one was picked up dead on November 20th.

The food in this aviary was white, red, and spray millet, hemp, rape, maw, insect food, and mealworms.

Orange Weaver (*Pyromelana franciscana*). The nest was found on September 10th, apparently three days, after the hen bird had started sitting.

On September 28th young were heard in the nest, and the parent birds were seen feeding them.

On October 14th, only one young bird left the nest, and on examination the nest was found to be quite empty, no eggs, and no more young birds.

The nest was built in a Bamboo, about 5 feet high, and the same bush contained five other Weavers' nests. The young Orange Weaver is alive and doing well.

BIRDS THAT HAVE NESTED AND REARED YOUNG IN 1913.

Parrot Finches (*Erythrura psittacea*)	4	
Gouldian Finches (*Poephila gouldiae*)	8	
Bicheno's Finches (*Stictoptera bichenovi*)	6	
Cuban Finches (*Phonipara canora*)	2	
Diamond Finches (*Steganopleura guttata*)	4	
Long-tailed Grass Finches (*Poephila acuticauda*)	3	
Rufous-tailed Grass Finches (*Bathilda ruficauda*)	3	
Ribbon Finches (*Amadina fasciata*)	8	
Zebra Finches (*Taeniopygia castanotis*)	40	
Silverbill Finches (*Aidemosyne cantans*)	12	
Spice Finches (*Munia punctulata*)	11	
Saffron Finches (*Sycalis flaveola*)	4	
Grey Singing Finches (*Serinus leucopygius*)	3	
Crimson Finches (*Neochmia phaeton*)	3	died
Mask Grassfinches (*Poephila personata*)	2	died.
Green Singing Finches (*Serinus icterus*)	2	died.

WAXBILLS.

Red Avadavat (*Sporaeginthus amandava*)	3	
Senegal (*Estrilda cinerea*)	3	
Orange-cheeked (*Sporaeginthus melpodu*)	2	died.

LOVEBIRDS.

Black-Cheeked (*Agapornis nigrigenis*)	4
Madagascar (*A. cana*)	1

PARRAKEETS.

Adelaide (*Platycercus adelaidae*)	1
Many Coloured (*Psephotus multicolor*)	eggs clear.

CONURES.

Hybrid Yellow-headed × Golden Crowned ... 2
Yellow Conures (*Conurus solstitialis*) eggs clear.
Black-headed Conures (*C. nenday*) eggs clear.
Cockateel (*Calopsittacus novae-hollandiae*... 6
Budgerigars (*Melopsittacus undulatus*) very plentiful.

LORIES.

Chattering (*Lorius garrulus*) 1

Guira Cuckoo (*Guira pririgua*) bred several, but they were eaten by Pies, &c., in the same aviary.

MANNIKINS.

Bib Finch × Bengalee Hybrid 4

DOVES.

Plumed Ground (*Lophophaps plumifera*)...... 2
Pigmy Ground (*Chamaepelia griseola*) 6
Senegal (*Turtur senegalensis*) 6

GROUND THRUSHES.

Orange-breasted (*Geocichla citrina*) eggs clear.
White-throated (*G. cyanonotus*) eggs clear.

WEAVERS.

Orange (*Pyromelana franciscana*) 1
Red-billed (*Quelea quelea*) 2

GROSBEAKS.

Virginian Cardinal (*Cardinalis cardinalis*) ... 1
Pope (*Paroaria larvata*) 1

WATER-FOWL.

Hybrid Snow Goose .... young died.
Carolina Duck 2

PIGEONS.

Bleeding Heart × Violet-breasted......Eggs clear

The figures in right of column indicate number of young fully reared.

[It would be of general interest if Lord Poltimore will kindly describe the Bib Finch × Bengalese Hybrids, also give as full details as possible of the breeding of the Plumed Ground Dove.—Ed.]

◆

Poling around the Tules

The Birds on Buena Vista Lake, Southern California.

By Wm. Shore Baily.

Our Editor has asked me to let him have a few notes on birds observed on the Pacific coast, so I am sending an account of a trip made some few years ago around Lake Buena Vista, and should it prove of interest will send some notes of the birds I saw on the Prairies and in the mountains, for other issues. Lake Buena Vista is situated on the prairie some twenty-five miles from Bakersfield, and is fed by the waters of the Kern River, which empty into it. In the winter and spring when the river is bank high, the lake has a circumference of about 40 miles, but in the summer when its waters are drawn off for irrigation purposes it is considerably smaller, but still remains a very considerable body of water, and a noted resort for wild fowl of all kinds.

At the time of which I write over 100,000 ducks were shipped from here to the San Francisco and Los Angeles markets annually. My partner and self had just concluded a very successful hunting season, and were thinking of shortly crossing the mountains to the coast. Before doing so I wished to pay a visit to some hunting friends on the other side of the lake. Instead of crossing direct I decided to take a trip round the lake. My boat was 16 feet long by 20 inches wide, and of course flat bottomed. With this narrow beam it was somewhat unstable, but although I travelled some thousands of miles in it I was only upset twice, once when poling I got my pole jammed in a crevice and foolishly hung on to it, another time when paddling, through reaching out too far to pick up a dead bird. But for an adjacent clump of tules, into which I was able to push the boat and tie it up, I might easily have been drowned on this occasion and as it was I had to dive for my gun and cartridges several times before I recovered them.

Having fixed up some provender for myself and a small terrier, I threw my blankets on board, and set out about half-an-hour before sun up, always the most interesting hour of the day, as the night feeding birds are returning from their feeding grounds, and the day feeders are busily seeking breakfast. Here the bottom of the Lake was firm and not too deep, so I was able to use the pole and was soon pushing along at the rate of some five miles an hour. Flocks of Ducks of all kinds, principally Mallard, Pintail, and Teal were continually passing over my head, to alight on the open water, here some 10 miles wide. As the sun rose, revealing my presence in the shadow of land, flocks of Gulls took wing, principally Herring, and Black-backed (identical with our English birds). The Black Cormorant was also numerous. It differs from our bird by having no white patch upon the thigh. Bird life upon this side of the lake was not very plentiful, as there were no feeding grounds, the water being confined by a levee some ten miles long, constructed by the company owning the adjacent land; however, I soon reached the southern feeding grounds. Here the water shallows off to nothing, making fine feeding grounds for all kinds of Waders, as well as for the surface feeding Ducks. A fringe of tules some two hundred yards from the shore protects the grounds from the north winds and rough seas, that prevail in wild weather. As my boat passes through an opening in the tules I find the shore alive with birds. Some of the Ducks took wing, but the Waders, which are little molested, suffered me to approach quite near. A large flock of Avocets (*Recurvirostris americana*), with a few Black-winged Stilts (*Himantopus candidus*) allowed me to get very close and it was interesting to watch the former using their curiously shaped beaks. Instead of probing as do the Stilts, they move their bills rapidly from side to side with a kind of sweeping movement. I think they take a good deal of vegetable food. A little closer in shore I noted a large flock of small Waders. These proved to be Curlew-Sandpipers (*Tringa subarquata*), a little bird I had previously met with in the Isle of Man. Poling slowly along I put up many more Waders including a mixed flock of Curlew and Whimbrel. The former were the Eskimo species (*Numenius borealis*), but the Whimbrels were similar to our European birds. Feeling that I had earned a rest, I pushed the boat into a bunch of tules, put the paddle athwart it and made it fast to the tules on either side. This makes the boat perfectly rigid, so that it would be impossible to upset it. Throwing a couple of decoys on to the open water, I wait to see what comes along.

The first birds to pay me a visit were a pair of Grebes. These birds are the unfortunate creatures that provide the Grebe skin of commerce, and when their skins are in fashion in Europe, many thousands of them are shipped from here to the 'Frisco markets. Luckily for the birds, they have been out of fashion now for a good many years. They are very inquisitive, and the pair, of which I write, approached my decoys to see what they were made of. After some hesitation the male decided that he was equal to the occasion, and made a sudden dash at one of the Ducks, delivering a lightning like thrust with its dagger-shaped bill. Had the Duck been of flesh and blood or even india rubber, as are some decoys, it would have been done for entirely, as it was the Grebe evidently received a horrid shock, for I next saw him and his mate some two hundred yards away, on the open water. Two other Grebes are found on the lake. The Eared Grebe (*Podiceps [Columbus] nigricollis, californicus*), a bird about the size of a Widgeon, with a bright patch of orange on the side of its face and the Hell Diver (*Podilymbus podiceps*), a bird similar in shape to our Dabchick, but almost twice the size.

The head and upper parts of its body are ruddy coloured, the breast dirty white. I have only once seen the Eared Grebe, but the Hell Diver is one of the commonest birds on the lake. They are marvellous divers, and can disappear tail first, as easily as the other way, and without a splash, too. It is amusing to watch them inspecting a bunch of decoys, or any other object, about which they are not quite certain. Their heads will suddenly pop up close to it, then two or three inches of neck appears, making them look for all the world like a briarwood pipe sticking out of the water. Perhaps they will remain like this for several minutes, and then gradually sink out of sight, their bodies not having been on view at all. For a little time nothing happens then a low "mamph"-"mamph" calls my attention to a small flock of Canvas-Backs (*Marila vallisneria*) flying past the decoys. I note the Ducks, turning their heads as they go by, which looks as if they meant to come back. Sure enough, after flying a mile or so down the lake back they come and alight with a splash some forty yards from the decoys. These handsome Ducks are more sought after than any other wild fowl. They are fairly plentiful in the winter, but do not stop to breed, like their near relative the Red-headed Pochard (*Marila americana*), which is one of the earliest Ducks to breed in southern California. The presence of this small flock soon encouraged other Ducks to put in their appearance, and they are joined by a little flock of Butter-balls (*Charitonetta albeola*) or Buffle-headed Ducks as they are called in the East. These are the smallest of the diving Ducks found on the Lake, and are very attractive in their black and white plumage. They do not breed on Buena Vista. Another little Duck to come swimming up, was the Ruddy Duck. I do not know if this is its proper name. It is a very closely feathered and thick skinned bird, and is very seldom seen on the wing, taking refuge in diving instead when alarmed. It is about the size of a Teal, rufous-coloured on the back and dirty white on the breast. It is not usually shot for food. While these birds were swimming about quite unaware of my presence, I had noticed flock after flock of White Pelicans (*Pelecanus erythrorhynchus*) flying down the lake. A colony of about one thousand of these fine birds have their home on the lake. The birds in view were switchbacking along if I may so describe it in strings of about 100 birds. A dozen strong flaps of the wings appeared to carry them about half a mile. They would rise about forty feet, and then drop to within a few feet of the water, soaring up again and to the same height, thus rising and falling until the impetus was lost, when a few more flaps would start them off again. Each Pelican followed its leader's movements exactly. As there were a good many Cormorants flying with them, I guessed that they must be on a fishing expedition. I decided to paddle after them and watch this very interesting operation. After paddling along a mile or so, I located the flock fishing on the shallow water between the tules and the land. Pushing my boat through and taking care not to show myself, I soon had an excellent view. The Pelicans, some four or five hundred of them were formed up in a half-moon formation, and were sweeping along parallel to the shore, beating the water violently with their wings. Within the half circle formed by the birds hundreds of Cormorants were diving and numerous Gulls and Terns were taking toll of the fish, which could be plainly seen jumping

The Tules

on the surface. Gradually the Pelicans at the extreme ends of the half moon, drew together, finally totally surrounding their prey. The fish, so far as I could see, were young white fish, of which there were two varieties, closely resembling our Roach and Dace. The other fish found on the lake are a Perch, similar in shape to ours, but grey in colour, and a Carp, identical with the European variety. There is also a small kind of Catfish, so fish-eating birds are well catered for. The Pelicans soon loaded themselves up, so that when I pushed my boat out they were either unable or unwilling to fly, and so retreated by swimming, which they can do at the rate of five or six miles per hour. They breed regularly on the island in the lake, but before doing so, they migrate to the lagoons of Mexico and Central America, where mating takes place For a month or six weeks in the spring, not one is to be found upon the lake. I well remember one spring, when crossing the mountains to the coast, hearing the well known whistling noise, made by the Pelicans' wings when soaring, and looking up and seeing the flock returning to Buena Vista. They were at an immense height, looking the size of Starlings, and as we ourselves were 8,000 feet up, they would have a pretty big drop to make to reach the lake. It was now lunch-time, so I tied up again in a bunch of tules, that gave me a good view of the feeding grounds, and made a good meal off "flap-jacks," preserved fruit, and coffee. Whilst refreshing the inner man, I saw a small flock of Sandhill Cranes (*Grus mexicana*) alight about one hundred yards from the edge of the water. These birds are grey with red-heads and are very handsome. They spend most of their time upon the open prairie or upon the large grain fields, returning to the lake at evening. I think that they are very largely vegetable feeders. About mid-day there is usually very little movement amongst the waterfowl, as most of them seem to take a siesta, especially if the weather is calm, and on this particular day it was oppressively close, and I found myself unable to resist a short "nap." I was aroused by the little dog licking my face, and, on looking to the north, I found the horizon as black as ink. It was evident that we were in for a heavy storm, and knowing what this meant on the water, I hastily pulled out to look for a more sheltered position. After paddling on a little further, I tied up in a bunch of tules, well inside the main belt, here about one hundred yards wide. As yet the wind had not reached me, but to the north there was a sound as of very heavy rain, and I could plainly see the white bodies of Pelicans and Gulls against the deep black of the sky as they made for shelter. In a very short time I could see white tips to the waves in the distance and then down came the wind with terrific force, and in less than ten minutes there was a heavy sea outside the line of tules; even in my shelter there was a heavy swell. Gulls, Ducks, and Waders of all kinds were driven past me in hundreds, having apparently lost all control over their movements, and I quite thought for some time that I and my boat would be driven after them. So great was the force of the wind that the water was driven back over the prairie for over two miles. When I tied up my boat I was within fifty yards of the land, and now I couldn't see where the water ended; all this time there wasn't a drop of rain, the darkness of the atmosphere being caused by driving sand. It was a very unpleasant experience, but luckily didn't last long, as within an hour the sun was again visible and the wind had dropped to a light breeze. As the pressure of the wind lessened the water began to flow back from the land, leaving a sea of mud. In this many thousands of fish and fry were left stranded and very soon all the Gulls and Terns on the lake were busy feasting on them. Of the Terns there were two varieties. One grey and white with a black cap to its head, like our English bird, and the other much darker, possibly the Sooty Tern. The water outside was very rough, but by keeping inside the tules, I was able to make fair progress, although the swell made the terrier sea-sick. Waders were very numerous, exploiting the newly wetted ground, where no doubt they found much rich diet. I noticed amongst the Avocets and Stilts a considerable flock of Bar-tailed Godwits, not a very common bird on Buena Vista. The storm had brought in its track an unusual number of birds of prey. They evidently expected to find a lot of wounded and crippled birds, and I have no doubt that very many of the smaller Ducks and Waders were disabled. Very noticeable amongst them was the Harrier, with its slaty blue back. Several

Peregrines were also to be seen, although this last bird requires no help from storms to catch its prey, for I have never yet seen the bird that could escape from them. I was now nearing the eastern shore of the lake. Here the foothills of the coast range run down to the water, which deepens rapidly. As it was still rough outside, I paddled into the first sheltered cove I met with, and pulled the boat on shore. As it was still two hours to sundown, I thought it well before pitching camp to take a walk to stretch my legs. After nearly ten hours in a boat, one gets somewhat stiff. The ground here was covered with sage bush. Further back the scrub oak begins to appear, and finally from 2,000 feet and upwards, various kinds of pines; many of them magnificent trees, whose lowest branch would be quite 150 feet from the ground. Here a small flock of Elk, strictly protected by the Government, have their home. These magnificent animals use the lake in the dry season as a watering place. The Grizzly Bear is still to be found amongst the pines, but very rarely now shows himself upon the plains. Amongst the other animals the White-tailed Deer is common, the Prong-horned Antelope once so numerous is now scarce, and the Wild Hog plentiful. Mountain Lions, Lynx, Racoons, and Foxes are common, and the three last named are always to be found on Buena Vista. I was now 200 to 300 feet above the lake and had a very fine view. Under the shelter of a near by headland a very large flock of both Black and White Brant were resting.

(*To be continued*).

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The Breeding of Mealworms.

By Rev. J. Mapletoft Paterson.

I have been asked by our Editor, and also by a well-known contributor to *Bird Notes* to give my experiences on the above subject, so I am trying to comply as best I can, in the press of parochial work.

My methods may not be of the best, but such as they are I venture to give them. In the lid of a 7lb. biscuit box I punched a dozen or more small holes. This box I filled three parts full with bran, mixing in about a pound of flour, and a few linen or cotton rags. Into this conglomeration I turned a pound of the biggest mealworms I could get, and put the tin in a warm place. In a few weeks the mixture had sunk to more than half its original height, and what was left was mostly dust. I filled up again with bran and flour still keeping the tin in a warm place.

In about two months from the start of these proceedings the box contained a large number of beetles, which were busy laying eggs.

I then transferred the whole lot from the biscuit tin into a galvanised iron sanitary bin (costing 3s.), and filled the dust-bin three parts full with bran, scraps of bread, waste seed, and pieces of sacking. The bin during cold weather is kept in a warm place in a heated green-house, and when in full working order supplies a cup-full of mealworms daily all through the summer. Last summer when I had several soft-bills to supply I had three such bins going, and even than could not satisfy the demands of a pair of Hoopoes with mealworms alone.

Warmth and plenty of food is all that mealworms require. They will eat nearly anything in the farinaceous line, and seem to thrive best on stale bread and waste seed, eating husks and all. The powdered refuse which collects at the bottom of the breeding tins should not be thrown away, as it contains hundreds of eggs. When the beetles become few in number, the largest of the mealworms should be left to turn into beetles, to keep up the supply of eggs. Needless to say the covers should be kept on the breeding tins, as the beetles have wings and can fly. Some breeders recommend that a covering of gauze or muslin should be fastened over the tops of the tins, instead of the proper covers, to admit air, but I found the loose fitting covers of the dust-bins admitted all the air that was necessary.

I did not keep any data respecting the various periods in the life history of the mealworm, but estimate them as follows :—

Egg	2 weeks
Larva	8 weeks
Pupa	2 or 3 weeks
Imago	Until the eggs are

laid, which takes place in two or three days. The males are greatly in excess of the females, and die a short time after copulation takes place.

In a warm temperature (80 deg. F.) I should think that development would be more rapid.

I opened a female beetle and counted twenty-three eggs in her, something of the size and appearance of small ants' cocoons.

I estimate that 1 lb. of mealworms should produce about 4,000 beetles, of which about 1,500 should be females. If these lay 25 eggs each, the produce should equal nearly 4 lb. of mealworms—thus if a breeder starts off with 4 lb. of mealworms, he will save three months delay in breeding.

The above estimates are only approximate. There may be some member or members who can, and kindly will, give exact data concerning the life history of the mealworm, and their experience in breeding it.

In conclusion, I do not discourage anyone from trying their hand at breeding mealworms, but if they keep soft-bills on a large scale they will be wiser to buy. I have heard of mealworms being carried round in a bucket, but I have never yet seen the breeding paraphernalia which could produce such a supply in one place.

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Club Meetings at the British Museum

The first meeting of this series was not as well attended as it might have been, considering its interest certainly more than a dozen members should have turned up.

It took place on Saturday, January 17th, in the Bird-Room of the Natural History Department of the British Museum, where by the kindness of Ogilive Grant, Esq., the skins of the Weaving Finches (*Ploceidae*) were arranged for our inspection, and we are much indebted to him and his staff for their courteous attention, for the getting out of the skins must have involved considerable labour.

It was of great interest to be able to compare closely allied species and note the distinguishing features. Also to see the skins of such a large number of species quite new to British aviculture, more particularly perhaps among the Waxbills, amply demonstrating that largely as the African avifauna has been imported, there is yet a large field open to the enterprising collector for the introduction of species new to aviculture to the English market. The skin of an albino Grey Waxbill (*Estrilda cinerea*) was also an object of much interest, the whole plumage being white except for the crimson eye-streak and rosy patches in the centre of abdomen and at the vent.

A very pleasant and interesting afternoon was concluded by those present - Misses A. S. Eccles, E. M. Knobel, Mrs. K. L. Miller, and Messrs. H. Goodchild, W. T. Page, W. T. Rogers, A. Silver, S. M. Townsend, C. R. Tyson, and S. Williams—taking tea together.

The next meeting will be on Saturday, February 21st, when we hope to have the pleasure of looking through the Flycatcher (*Muscicapidae*) series of skins. *Rendezvous*: Entrance Hall, 2-15 p.m. W. T. ROGERS.

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Correspondence.

THE RED-BREASTED FLYCATCHER.

Sir,—Your note on the Red-breasted Flycatcher has caused me to look up the species, in so far as it comes into the Indian area; it is a species I know well—in fact I shot and skinned a male only two or three days before the arrival of *Bird Notes*. First of all I find in the "Fauna of British India,"—Birds, Vol. II., p. 9, the following: "The young are spotted on the upper plumage and breast with fulvous. After the autumn moult young males commence to assume some red on the breast, and they become fully adult by the spring." This does not agree with Howard Saunder's statement (as given in your note), from which I gather the bird becomes fully adult by the third year. Here is a chance for the practical aviculturist—breeding a difficult species to solve a disputed point!

By way of a peg on which to hang my own few notes I will start by quoting the valuable account given by Capt. Whitehead in his "Birds of Kohat and Kurram" (Ibis, 1909):

' Major Magrath has made the following notes on the species:

'A winter visitor abundantly reinforced during the spring migration. The rush north-west is at its height in the middle of April and continues till the end of the month. The last birds remain till well into May. The adult males are the first to leave, the females and immature birds following two or three weeks later. The return migration commences in October. Few examples with chestnut breasts are to be seen at this season. This Flycatcher constantly descends to the ground to take its prey." In autumn I have seen it as early as September 13th. We did not meet with a single adult male in winter, the first appearing about the middle of March."

In Rawal Pindi District, 1910-1911, owing to illness, I was not observing during the autumn migrations, but noted the species in small numbers during the winter. However, in the first half of April great numbers passed through on migration. So far as it goes this agrees with the status of the species in Kohat and generally speaking the ornithology of Kohat and Rawal Pindi districts is very similar.

I next met with the species in Ferozepore district, very much further south. Here it was very numerous on the spring migration of 1912. It was first met with, March 27th, and continued numerous during the first half of April. But I cannot find any mention of it from that district either on the autumn migrations or during the winter.

Here in Jhelum district it was very numerous during the spring migration this year in April, being last seen on the 27th of that month. It arrived again on the autumn migration and I first saw it on the 4th October. It was numerous during October, but as soon as the migrations were over, it was clear that comparatively few individuals stay for the winter. In view of Capt. Whitehead's note I may remark that I shot a red-breasted male on 8th January.

I agree with your criticism that there is too much flower in the background of the coloured plate, the really typical perching place is a twig or bare branch in the shade *inside a tree* (if the phrase may be allowed), hence the bird is not very conspicuous and may be easily overlooked. When this little Flycatcher was only known to me through the medium of coloured plates, I used to wonder how it was to be distinguished from a Robin, if the tail was shut. Yet there is really no danger of confounding the two birds, for the Flycatcher is jerky and restless in its movements, constantly flirting the tail over its back, so that the patch of white catches the eye sooner than the red breast. It is much smaller than the Robin and is more likely to be mistaken for a small Warbler than anything else, for the bright colouration of the breast only shows up under the most favourable conditions of light and background. The harsh, jarring alarm note is however, very distinctive and often calls one's attention to an individual that would otherwise be overlooked.

Like so many other small birds, the Red-breasted Flycatcher is very pugnacious; only a few weeks ago I saw two small birds fluttering together in the air, fighting vigorously, and shooting them, I found I had secured two females of this species.

It would be a most interesting and valuable series of plates for our Journal if you could figure the other races *M. parva albicilla* (Pall), and *M. p. hypherythra* (Cat.), as well as *M. strophiate* (Hodgs.).

HUGH WHISTLER.

Jehlum, Punjab.
12/1/'14.

["Fully adult" must be read as meaning *fully adult plumage*, as the young males pair in the immature plumage of the first year—it appears to me that the discrepancy between H. Saunders and W. Oates is merely as to the extent of the red area at a given period for the red on the chin and throat is assumed in the second year, but (according to H.S.) *does not extend to the breast till the third year*—possibly this may have arisen from a loose use of the terms throat and breast. However, as Mr. Whistler states, this is a point which aviculturists can easily determine, either by breeding the species, or obtaining a young male in nestling plumage, and noting whether the red area only extends to the base of the throat at the moult or whether it extends to the upper breast as well; the result of the next moult should also be carefully noted as to depth of hue, and as to whether the red area is increased—Unfortunately the species is not often on the English market.—Ed].

◆

RE THE BREEDING OF BLUE BUDGERIGARS.

Sir,—I have just heard from a Devonshire Aviculturist that he has been successful in breeding a Blue Budgerigar from Green (blue-bred) parents. The parents were bred as follows: A Blue cock was mated to an ordinary Green hen, the produce being all Greens, one of these young Greens was mated back to the Blue parent, the result being again all Greens, three only. Between this and the next pairing the Blue cock died. My correspondent retained a pair of these last Green birds, and I acquired the odd one, a fine cock, which I still have. These last blue-bred Greens were mated and have now produced a Blue youngster, which came out of the nest for the first time yesterday, (Feb. 9th, 1914).

E. SPRANKLING.

Taunton,
10/2/'14

Post Mortem Reports.

Vide Rules (See Page iii of Cover.)

◆

DEAD BIRDS FOR *Post Mortem* EXAMINATION RECEIVED DURING THE MONTH ARE REPORTED UPON IN THE FOLLOWING ISSUE OF "BIRD NOTES."

GREEN BUDGERIGAR (♂). (Baronne Le Clément de Taintegnies, Cleveland, Minehead. The left pulmonary air-sac contained a cancerous-looking growth, which had been some time forming.

MASKED GRASSFINCH (♂). (J. L. Grossmith, the Grange, Bickley). The liver contained caseous nodules; also a similar nodule was attached to the intestine. These nodules were no doubt set up by the fungus (*Aspergillus fumigatus*).

LONGTAIL TIT (♂). (W. A. Bainbridge, Thorpe, Surrey). The bird was very fat. No doubt death was due to fatty changes in the liver and other organs.

COCK RED-RUMP PARRAKEET. (B. Hamilton Scott, Hamildean, Ipswich). Beyond the viscera being congested, there were no gross lesions. Evidently death was caused by cold.

PURPLE SUNBIRD. (A. Ezra, 110 Mount Street, W). There was a minute extravasation of blood on the surface of the brain, no doubt due to the rupture of a small blood vessel. The symptoms you mention very much resemble those seen in game fowl and other birds suffering from meningitis.

BLACK-BREASTED MEXICAN QUAIL. (Wm. Shore Baily, Westbury). There were cheesy croupous deposits the size of a millet seed on the roof of the mouth, on the tongue and inside the larnyx. These deposits are characteristic of a subacute form of diphtheria, which is very contagious and often causes great mortality. If recognized in time painting the spots with tincture of iodine and giving sulphocarbolate of soda in the drinking water might have been of some use. The bird was well nourished.

CANARY (A. S. Eccles, Ditton Hill, Surrey). The left abdominal air-sac contained a yellowish cheesy mass, the size of a pea. This was set up by the presence of the fungus *Aspergillus fumigatus*. The canary seed in sample sent is not of good quality; it is darkish and at its opening contains a black spot. Refuse such seed. Please send me another sample as I threw it away before microscopically examining it for the fungus mentioned as the cause of your bird's trouble. The fungus *Aspergillus fumigatus* is the cause of the so-called "canker" of pigeons, which is technically known as Aspergillosis. Frequently it attacks the lungs, liver, kidneys, and the membrane of the air-sacs and peritonium, causing nodules, resembling in appearance those of tuberculosis for which it is too often mistaken. Liquor arsenicals and iodide of potassium in the drinking water may, if given early, be of some use.

Java Sparrow. (Mrs. Davies, Daresbury Hall, Warrington). Cause of death, pneumonia.

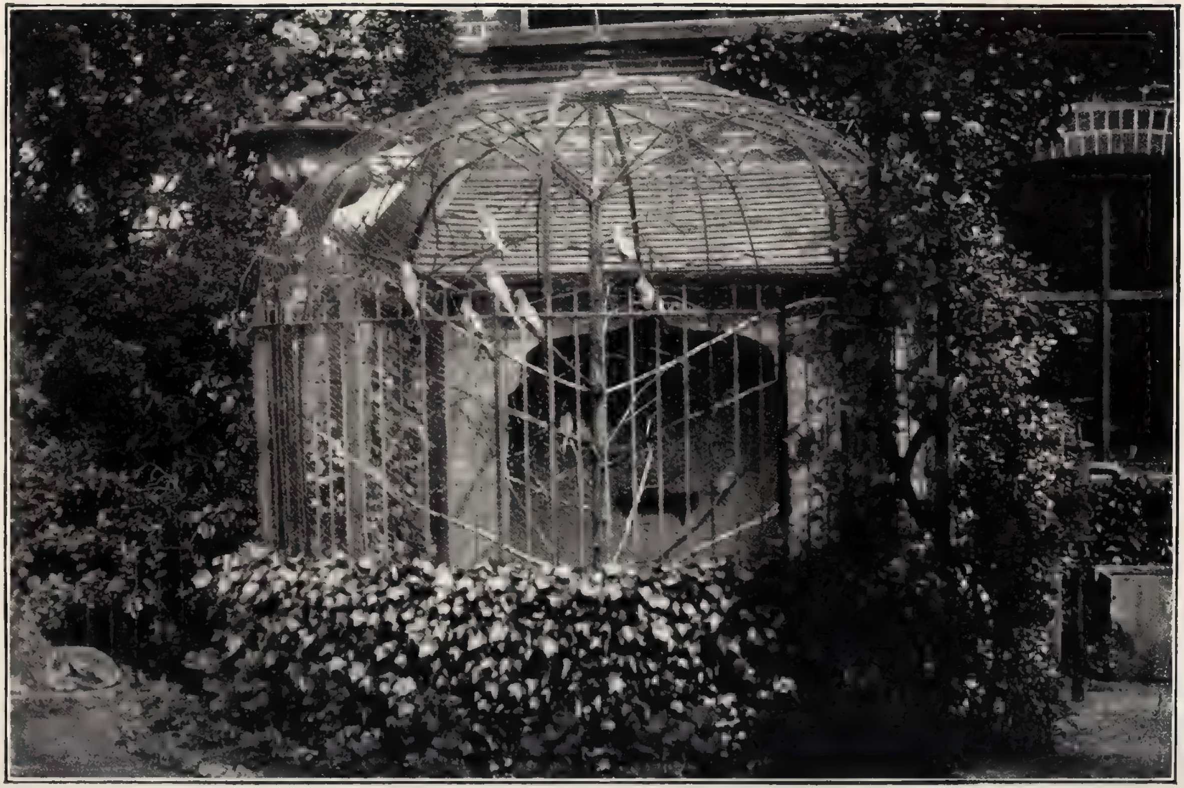
German Hen Canary. (Miss M. Maxwell-Jackson, Cowhill, Rutland Road, Harrogate). Cause of death, pneumonia.

Bourke's Parrakeet. (W. R. Fasey, Snaresbrook). The chest cavity contained effused blood and the muscles over the ribs had a bruised appearance, suggesting external violence.

Hardwicke's Blue-winged Fruit-sucker. (J. L. Grossmith, the Grange, Bickley). The bird was very fat. Death was due to heart failure.

Correction. In my report, under Red-crested Cardinal, on pages 18 and 19 (pink paper) of last issue there are several printer's errors as follows: "Iodine of Potasium" should read *Iodide* of Potassium: "observed" should read *observes*; Lavenduld" should read *Lavendula*, "Pharmacopaeia" should read *Pharmacopœia*.

H. GRAY, M.R.C.V.S.



B. Hamilton Scott's Aviary. No. 2.

Avian Press Process.

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BIRD NOTES:

—— THE ——

JOURNAL OF THE FOREIGN BIRD CLUB

The Aviaries at "Hamildean"—Ipswich.

BY B. HAMILTON SCOTT.

Our Editor has asked me to send some notes and photos of my aviaries and birds, but I fear they will be of little interest. At present I have only two aviaries, though I hope to build another this season. I have also a large well lighted bird-room over the stables, where I keep most of my young birds and surplus stock, and two smaller wired-in places hardly worthy of the name of aviary.

AVIARY No. 2: This aviary is circular-fronted, has a domed top, and adjoins the stables and faces S.W., it was originally intended as a kennel for large dogs. The outer portion (flight) is surrounded by a low, ivy covered wall, on the top of which is a light palisading; on the top of the latter a domed roof was constructed. A wooden partition was removed, which gave access to a cosy inside house 9 × 5 × 7 feet high. The area of the outer portion is 11 × 9 feet, the height of apex of dome is 9 feet; it is covered with $\frac{3}{4}$ inch mesh netting. The floors are asphalt. There are no growing bushes in this aviary, as it is peopled principally by Parrakeets.

Below I give a list of its occupants and a record of the season's (1913) results:

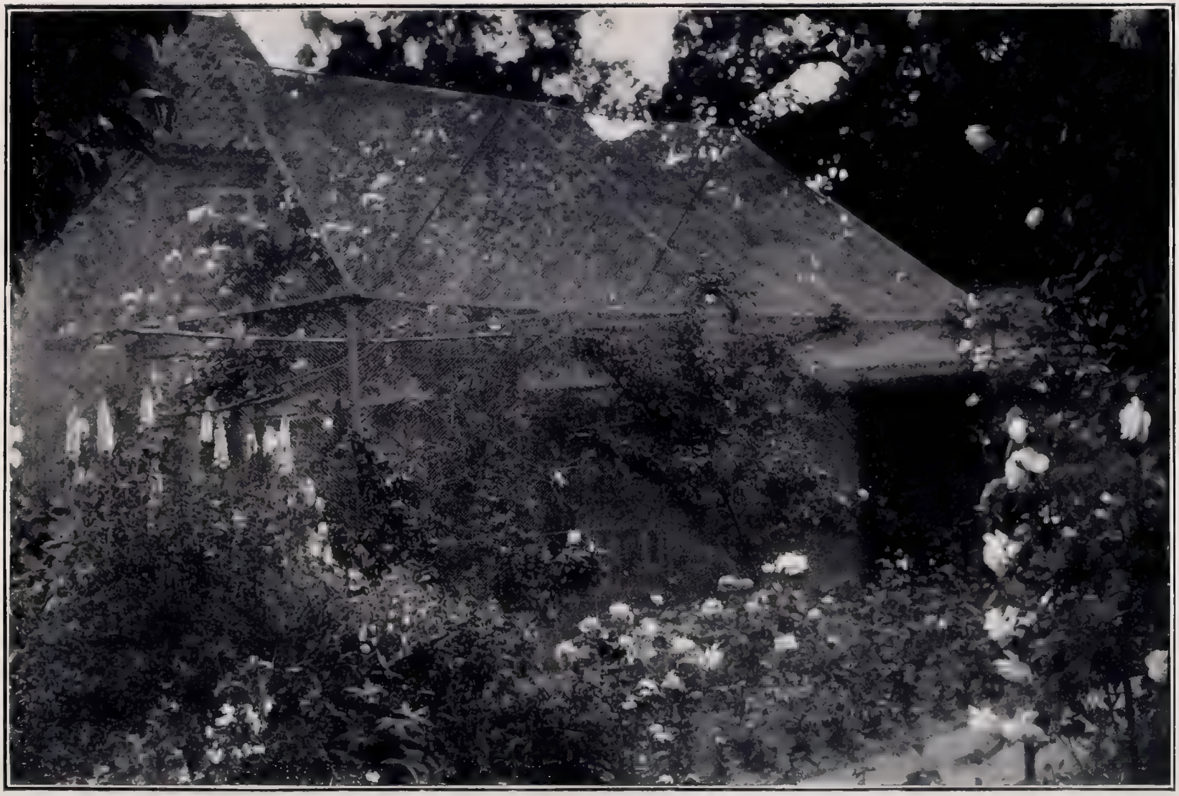
Dominican or Pope Cardinals (*Paroaria larvata*): These have not proved half so ready to nest as their Red-crested cousins, not having made any attempt to reproduce their kind.

Cockateels (*Calopsittacus novae-hollandiae*). My old pair, of prolific repute, have again done well; thirteen young birds have been fully reared, as the result of three nests in broods of four, five, and four.

Green Budgerigars (*Melopsittacus undulatus*): Not so successful as in past seasons, but there are several young birds about.

Red-rumped Parrakeets (*Psephotus haematonotus*). I have been unlucky with this species, or at least with its male members. In the autumn of 1912 I bought a beautiful hen from one of our members, and in the spring I procured a fine mate for her. Everything seemed to be going swimmingly. They inspected the nesting receptacles and seemed to find one to their liking, for they were constantly in and out of it. About a fortnight later, judge of my surprise and and chagrin, when on opening the door of the inner-house I found the beautiful cock lying dead! The day after his death the little hen laid her first egg, subsequently laying two more. She incubated steadily for the whole time and was very seldom seen off the nest; unfortunately all the eggs were infertile. I believe, had young been hatched out, she would have reared them, for she was most attentive. [It is by no means uncommon with this species for the male to have to be removed while the young are being reared and the hen left to bring up the young, which she usually does successfully.—Ed.]. I advertised for another cock, but without success. However, in late September I bought a young male of the year, not then in full plumage. He was moulting into a fine bird, when he also died suddenly, having been in my possession nearly four months, and the little hen still wants a mate.

Aviary No. 1: This, my largest aviary was only completed in the early spring of last year: it is planted with bushes and climbing plants, with a grass lawn in the centre: the whole being surrounded with a crag path. The area of the aviary is 26ft. by 12ft., 15ft. high at ridge, and 8ft. at the sides. It is covered with $\frac{5}{8}$in. mesh netting, which is let into the ground 1ft. all the way round, and then turned outwards for a few inches. The span roof, which was put on to existing iron uprights (covered with roses), is made of $1\frac{1}{2}$in. angle-iron, which although quite light is very strong. The whole work of cutting the iron into necessary lengths, of drilling holes and bolting together, etc., was done by a handyman—a sort of Jack-of-all-trades with the help of a labourer and also myself for a part of the time, and. I think, considering the somewhat cramped quarters they had to work in (there being a rose-bed on the one side and a herbaceous border on the other), the result is most satisfactory (*vide* photo), and the work of these two men compares very favourably with that of some of the best firms of aviary builders; and the price, too, was right.



B. Hamilton Scott's Aviary. No. 1.

Attached to this flight is an inner house (shelter) some 18ft. long by 8ft. wide and 7½ft. high; which is furnished with numerous branches of dead evergreens, etc., for the birds to roost and nest in. It has a concrete floor.

The varied occupants are all of the more or less common (freely imported) species. Breeding results have not been very great, still there have been a fair number of young birds, the results are as under—

Red-crested Cardinals (*Paroaria cucullata*): A pair of this species were transferred from one of the smaller wired-in places about the beginning of June. They were not long in starting operations, choosing for their nesting site a forked branch of a small acacia tree. Quite a large nest was built, which with a little human aid was made a perfectly secure structure. Three eggs, formed the clutch, which were rather long and pointed, of a dull greenish-grey, spotted and mottled with a darker shade, especially at the larger end. The eggs from this hen were considerably larger than those of the hen whose nesting episodes were recorded in "Bird Notes," 1911, p. 147; the cock being the same bird that was successful in that year. All three eggs hatched out, and the young left the nest about the fourteenth day, and were fed almost exclusively on mealworms, ants' eggs, and green caterpillars. They are now full grown and quite independent of their parents. They eat a large quantity of fruit, being especially fond of pears.

Senegal Turtle-Doves (*Turtur senegalensis*). These have had four nests, and six young birds have been fully reared.

English Turtle-Doves (*Turtur turtur*). These nested twice, three young birds being successfully reared.

White Java Doves (*Turtur risorius* v. *albus*). I keep these mostly as foster-parents for the rearing of rarer species (I find them excellent foster-parents), but they had very little to do in 1913 in the way of rearing foreigners. They reared four young birds of their own; numerous clutches of eggs were laid most of which were removed.

Zebra Doves (*Geopelia striata*). This species made no attempt to nest although in perfect condition, and apparently a true pair. [Similar lack of results are reported from many aviaries.—Ed.].

Rufous-winged Doves (*Chalcopelia afra*). Also a failure, and I fear they are both males—this species is also known as the Emerald Dove, a singularly inappropriate name.

Greenfinches (*Ligurinus chloris*). These nested in a dead tree in the shelter and fully reared four young birds, which have since been given their liberty.

Chaffinches (*Fringilla coelebs*). A nest was built in an ivy covered stump, and the eggs were just about to hatch, when they were disturbed by the Cardinals who pulled the nest to pieces.

Bullfinches (*Pyrrhula europaca*). A nest was constructed amid the branches in the inner-house, but they did not get as far as eggs.

Siskins (*Chrysomitris spinus*). These were continually carrying nesting material about, but never completed a proper nest.

Goldfinches (*Carduelis elegans*), Bramblefinches (*Fringilla montifringilla*), and Yellow Buntings (*Emberiza citrinella*) made no attempt whatever, although all were very fit.

Reed Bunting (*Emberiza schoeniclus*). A hen of this species built a large nest in a box-bush and laid five eggs. She was on several occasions attended by the cock Chaffinch and I had hopes of hybrids. She incubated for the full period, but all the eggs were infertile.

Pairs of Paradise Whydahs (*Steganura paradisea*), Cutthroats (*Amadina fasciata*), and Ortolan Buntings (*Emberiza hortulana*), have not attempted to nest, but all are comparatively recent arrivals.

In conclusion I should like to say that I think there are few more fascinating hobbies than bird-keeping, especially foreign bird-keeping, and I hope a little later to possess many more foreign species.

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Some Punjab River Birds.

By H. Whistler, I.P., M.B.O.U.

(*Continued from page* 43.)

The Indian Skimmer or Scissorbill, *Rhynchops albicollis, Swains,* is remarkable for its extraordinary bill. The lower mandible is about three-quarters of an inch longer than the upper; both mandibles are very deep, but extremely compressed laterally, the aperture of the mouth being very small. The general effect (on a smaller scale) being as if the blade of a small table knife were placed along the back of a large table-knife, both knives being in the same plane, and their hilts together.

The purpose of this curious development is seen when the birds are feeding, for they fly along with a steady flapping gait, often several together, with the lower mandible cutting through the water like the prow of a ship, and this they do, either pursuing a straight course, or continuously beating up wind and then circling round to beat up again over the patch of water.

A small point but one not without interest arises here: the figure in Vol. IV., p. 296 (*loc. cit.*),* depicts the bird skimming with the beak closed; yet I have observed it with the mandibles wide open. Doth the bird skim in both ways? and if so,—what is the difference in effect to the bird? The reason of this highly specialised bill and method of feeding is apparently unknown, but a yellowish oily fluid is stated to be often found in the stomachs of birds examined, and it seems reasonable to surmise that this is some floating substance which is skimmed from the surface of the water. On one occasion I found fish scales in the stomach of a bird shot for my collection, and small fish have been reported.

Another curious feature in the bird is its extremely long wings, which give it an ungainly looking flapping flight, which will identify it (if seen) at a great distance, but I have often noticed that the colouration of the species--black above, white below—renders it almost invisible even at moderate distances. They have a loud harsh cry, most peculiar in character.

In the Northern Punjab the species appears to be a summer visitor only, arriving in March and leaving about the middle of August. The eggs are laid early in May.

The nest is a mere hollow in the sand similar to that of *Sterna seena,* without any addition of material; but the eggs are as a rule very different, some approaching in colouration to the purple blotched eggs of the Sooty Terns. The ground colour varies in tint from pale buff or stone colour to greenish or greyish white; with streaks, spots, and often large blotches of dark brown, and pale inky purple.

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* "*Fauna of British India.*"

The measurement of 9 eggs yields the following results: length from 39.4 to 42.5 mm. Breadth, from 28.1 to 31 mm. Average dimensions, 41.3 x 29.6 mm.

A more interesting Tern than *Sterna seena* is the Black-bellied Tern, *Sterna melanogaster*, Temm., which is perhaps the commonest Tern of the Punjab waterways--at any rate the most generally distributed both in time and place. Yet for some reason I have found it much more difficult to secure eggs of this species than of the others--though I have found numbers of nests either empty or with young.

It nests in company with other Terns and Pratincoles, or in small colonies of its own, or else alone; and is most courageous in defence of its young, making tremendous stoops at an intruder, often passing within a foot or two of his head. In fact a rough guide to the whereabouts of the bird's nest is obtained from the vehemence of the bird's attacks, which become more violent as the nest is more closely approached.

As far as I can make out the bird is probably in some degree a migrant, but as it is equally common at all times of the year it is difficult to define the extent to which it is migratory. Yet the presence of flocks at certain times and places in addition to the ordinary population clearly points to some form of migratory movement being in progress. It is a great wanderer and soon finds out and visits any patch of water, even a small temporary flood, miles away from permanent ponds or waterways.

The nest in this species is a plain hollow, scooped in the sand without any use of materials. Three eggs seem to form the normal clutch. The eggs are of the typical Tern colouration, but the shape is rather more elongated than those of *Sterna seena*. They are laid in April and May.

The measurements of two eggs are as follows:--34.0 x 25.5; 32.5 x 26.5 mm.

This Tern is most distinctive in appearance, owing to the sooty black of the underparts. It is thus described (*loc. cit.* Vol. IV., p. 316).*

> Forehead, crown, and nape, with the sides of the head down to the lower edge of the orbit, black; very often the extreme base of the forehead is white like the lores, chin, and throat; upper parts

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* "*Fauna of British India.*"

from nape, ashy grey, slightly tinged with brown on the tertiaries, tips, and parts of inner webs of primaries generally dusky, outer webs frosted and whitish; tail paler grey than the back, outer webs of outermost rectrices white; fore neck pale grey, gradually passing into chocolate, then into black on the breast; abdomen and lower tail coverts black; wing lining white.

In winter the cap is white, streaked with black, and the lower parts white. According to Hume the winter plumage is not assumed till December, and is only retained for about two months. Very young birds have broad buff outer and blackish inner borders to the feathers of the upper parts.

Bill orange yellow; *irides* blackish brown; *legs and feet* orange red.

Length 13 ins.; *wing* 9 ins.; *bill from gape* 1.8 ins.

It seems doubtful how long the immature bird takes to obtain the adult plumage, for in May and June of this year I came across numbers of birds in which the cap was brown streaked with black, and with only a few black feathers on the underparts; they were clearly not birds of the year, and were doubtless non-breeding immature birds of the previous season; but it remains to be seen whether a proportion only of the birds do not assume adult plumage in the first spring (as is the case of some other species of Tern), or whether all young birds pass one summer in this intermediate garb.

The nestling in down is above creamy white tinged with dirty yellow, and speckled with black, the head being most marked; the under surface is white; *bill* reddish, the tip black;; *feet* pale pinkish red.

A third species of Tern which nests on these sands is the Lesser Tern, *Sterna minuta*, Linn., a well-known British nesting species, although the form found breeding in India is sometimes separated under the name of *Sterna gouldii*, Hume. This is much less numerous than the other two species described, and I have only once come across the nests, when I found a small number breeding apart near the Terns and Skimmers of the Sandbank on which the previously described night attack was made. It appears to be a summer visitor only.

Although not a breeding species in the area under discussion, mention must be made of another Tern, which at certain periods is a most noticeable feature on these rivers. The Whiskered Tern, *Hydrochelidon hybrida* (Pallas.), breeds in great quantities on the lakes of Kashmere, and in the

N.W. Provinces, but in the northern Punjab is chiefly noticeable on the Spring Migration. For instance this year at Jhelum from the end of April till the 1st week in July I saw immense numbers on the river, and it is remarkable that nearly all were seen flying up stream, *i.e.*, towards Kashmere; but whether this was a steady procession of birds passing upward without intermission, or whether I saw the same or many birds day after day and it was by a mere coincidence that I always saw them flying up stream, are questions that I cannot answer. Another curious thing is that up to date (November) there have been no signs of the return migration except a couple of odd birds in September. Do they return by another route? or is the return migration (contrary to what one would expect) quicker than the Spring, and has it passed on some occasion when I have been in camp? The same Spring migration was noticeable at Phillaur, in April and May.

The most difficult nest to find on the sands is that of the Little Ringed Plover, *Aegialitis dubia* (Scop.); the first intimation that one receives of being at the breeding quarters of a pair of these birds is that they may be seen running rapidly on the sand, or flying swiftly about a few feet from the ground, giving vent to a piping whistle; but to know that one is in the neighbourhood of a nest is a very different matter from finding that nest, since the bird is from its size and colour very difficult to see on the ground at a distance, and watching from near at hand is useless, for the bird is most suspicious during the breeding season. With luck one may hit on a track that leads one to the nest, but as a rule tracking merely brings one to an area which is covered with footmarks, without a sign of the eggs; the bird is a most indefatigable pedestrian! And to add to the confusion the bird frequently starts feigning wounded and then one doesn't know whether to look for eggs lying in a hollow qtogether, or young birds scattered and crouching flat on the sand; the only certain thing is that it is useless to follow the decoy!

The Little Ring Plover is smaller than the Kentish Plover (the only other bird of the kind likely to be met here) and is easily distinguished from it by the fact that there is an unbroken black band across the breast; the black markings on the head, and the yellow eyelids are points which serve to identify this little bird from its larger relative; since size alone is not much guide to the species, unless, as often happens, both birds occur in the same flock.

The bird is, I think, both a resident and a migrant in these parts: for instance here in Jhelum one may expect to find a few birds all the year round, yet about the second week of October I was accustomed to find a small flock of these birds mixed with Kentish Plover (which are migratory) on the golf course by the river and on the sandbanks: yet the flock vanished as it had arrived, suddenly, so probably had rested on migration.

The eggs are similar to those of the English Ring Plover, *Aegialitis hiaticula,* but are smaller; they are laid in a hollow on the sand in April and May.

As the down plumage is not described in any of my books, I append the full description taken from young birds that hatched from a clutch of three eggs, taken on 22/4/'13.:

Lores and forehead white; crown and nape rufous and grey mixed, bounded by black lines, running from the lores and through the eye to meet on the nape a broad pure white collar round the neck bounded below by a second, broader, but not so intense black line. Upper surface a mixture of rufous grey and brown bordered all round by a black line; tail tuft black; wings, basal half the same as the upper surface, the remainder pure white, the division of colours being marked by a broad black line diagonally from the elbow to the wrist. Under surface pure white tinged with rufous on the flanks and vent.

In describing the above few species I have only just touched the fringe of Indian river life: as much and more again might be found to write about the Ducks, Geese, Storks, Herons, Sandpipers, etc., etc., to say nothing of the smaller Passerines which haunt the grass jungles and the birds of prey which find their living along the shores or in the water.

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Ducorps' Cockatoo.

(*Cacatua ducorpsi*).

By S. Williams, F.Z.S.

In response to our Editor's request for copy I am penning these few notes of my Ducorps' Cockatoo.

Cocky, for that is how he introduced himself to me, was one of the tamest birds I have known. I say was, not because he has joined the great majority, but has gone to one of our members—Mr. Thorniley. I was sorry to part with him, but my Blue-crowned Conure (*Conurus haemorrhous*), a rare bird and an exceptionally fine talker, took a dislike to him, and fearing this (as he sulked), would stop him talking, loth as I was to part, Cocky had to go.

The Ducorps' is one of the smaller White Cockatoos, which inhabit the Solomon Islands; when at rest it looks as if it were a white marble image. The crest, unlike that of the great White Cockatoo, is short and thick, white lined with a delicate salmon-pink; the wing feathers, when the bird is flying, show a pale primrose-yellow edging beneath. This sketchy description and the photos will convey a general idea of his appearance and character. The photos were taken by my brother last year, while Cocky was enjoying open-air treatment in the garden.

I first saw Cocky when on a visit to an east-end bird shop to obtain my monthly supply of mealworms for my Weavers. In a small Parrot-cage was a dirty white bird, looking like a chief mourner at a funeral; I spoke to him and he pulled himself up and greeted me as follows: "hullo cocky"—"little piece for Cocky"; the dealer said he was quite tame, so being familiar with these birds I opened the door of his cage and, before you could count ten, he was out and had scrambled on to my shoulder. We were soon friends and I decided to add another member to my feathered family. He did not relish being put into a box for transit to his new home, and showed, although quite tame, that under provocation of this kind he could use his beak; what power these birds possess in their mandibles! Don't think it was my finger, I thought as the dealer was going to have the money he would like to take the risk of a parting gift too. Thus Cocky came into my possession.

As soon as I arrived home I took off the lid of the box and out he scrambled, evidently very glad to be free again. I found he was just commencing to moult, and after several baths—he was fond of a good splash too—his new feathers began to show; in three months you would not have recognised him for the same bird. When I bought him, one wing had been clipped, so, of course, he was unable to fly, but even after all his flight-feathers were grown, only on one occasion did I know him to use them thoroughly. He arrived in the early summer, and every morning his cage was put out in the garden beside that of the Conure. When I was at home Cocky was given his liberty; he would walk across the lawn and climb up to your shoulder and kiss you, bark like a dog and imitate a hen calling her chicks to perfection; he was also an accomplished whistler. Sometimes while I was watering my front garden, Cocky would accompany me on my shoulder, much to the astonishment of passers by. When he was being photographed in the garden his cage was accidently knocked over, this was the only occasion on which I saw him use his wings out of doors—as the cage went down Cocky rose in the air and I thought he was lost, but after a fly round the house, he came back and settled on my neighbour's lawn, and I fetched him round; from that day to the time he went to Mr. Thorniley, he never attempted to fly again when out of doors, though he would fly across a room from one person to another.

As a linguist I considered him exceptional for a Cockatoo. On entering the room one was greeted with "Hullo Cocky"—"A little piece for Cocky"—"Pretty Cocky," etc., his bark was perfect, as also was his mimicry of barn door fowls, and his whistling was equally good—had he remained with me, undoubtedly his progress would have been continuous

He appeared at the Horticultural Hall on two occasions, and was awarded third and second prizes in successive years

He was easy to cater for, his staple diet being canary, sunflower, and hemp seeds, apple, toast crusts; nuts he never refused; as a *tit-bit* he would help himself from my porridge basin after I had finished, but perhaps, what he liked best of all, was to take anything you might be eating from your lips, nothing came amiss, but I never allowed him to have it when there was meat or fish going.

In conclusion, let me advise my readers, that if they contemplate trying one of the Cockatoo family to get a Ducorps'; their value is about £4 (acclimatised), as they are very uncommon on the English bird-market.

Those of our members who keep other varieties of Cockatoos should send in some notes of their birds—such would be not only of general interest, but helpful to many, and our Editor is always ready for copy for *Bird Notes.*

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The Old and The New.

By E. F. M. Elms.

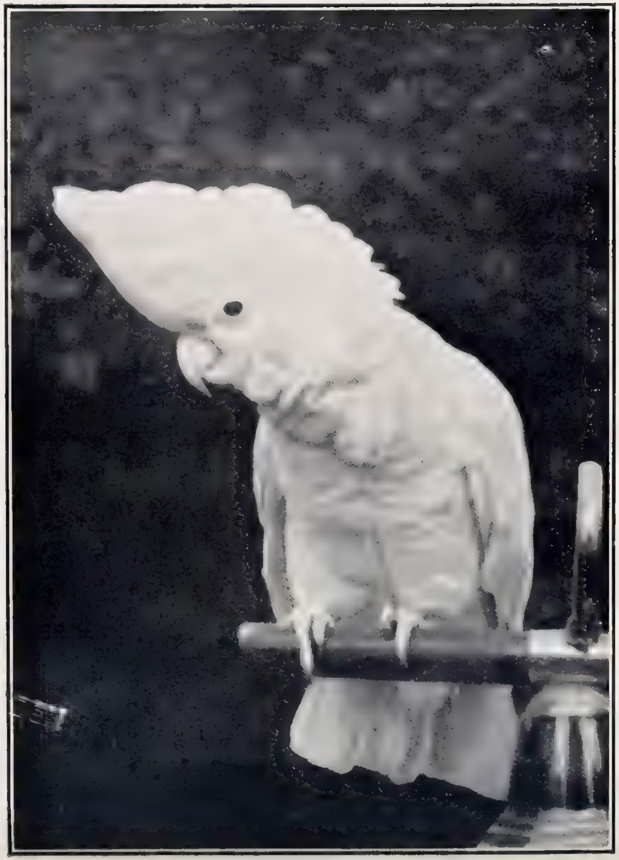
Since you, Mr. Editor, saw my aviary last year and advised me to make certain changes, I have made yet another one.

The old aviary answered very well, but I recently decided on a garden improvement, and as this structure stood in the way, it had to come down and my humble collection be transferred to another aviary.

I doubt if these notes can be of much interest, but you ask for copy, so I am sending a few records of the old aviary, and plans and description of the new.

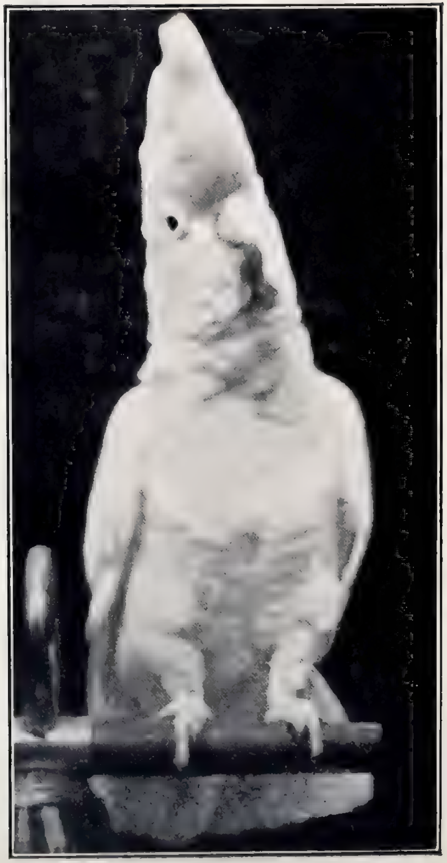
The New Aviary: There was near the house a weather boarded coach-house, and tool-shed, with loft and fruit-room over, for nearly all of which I had no real use. Reserving a part of the ground floor for a tool-shed, I have otherwise given up the whole place to the birds. The aviary is entered by a glazed door, from the end of the tool-shed, which opens on to a tiled space, near which is a shallow cement bath. Along the back of the shed, some 3ft. 6in. wide are two cages—the largest inhabited by a pair of Cockateels, and the smaller by a pair of Red-rumped Parrakeets. The remainder of the ground area is planted as a thicket with various evergreen shrubs, and some climbing roses, honeysuckle, ivy and *Polygonum multiflorum.*

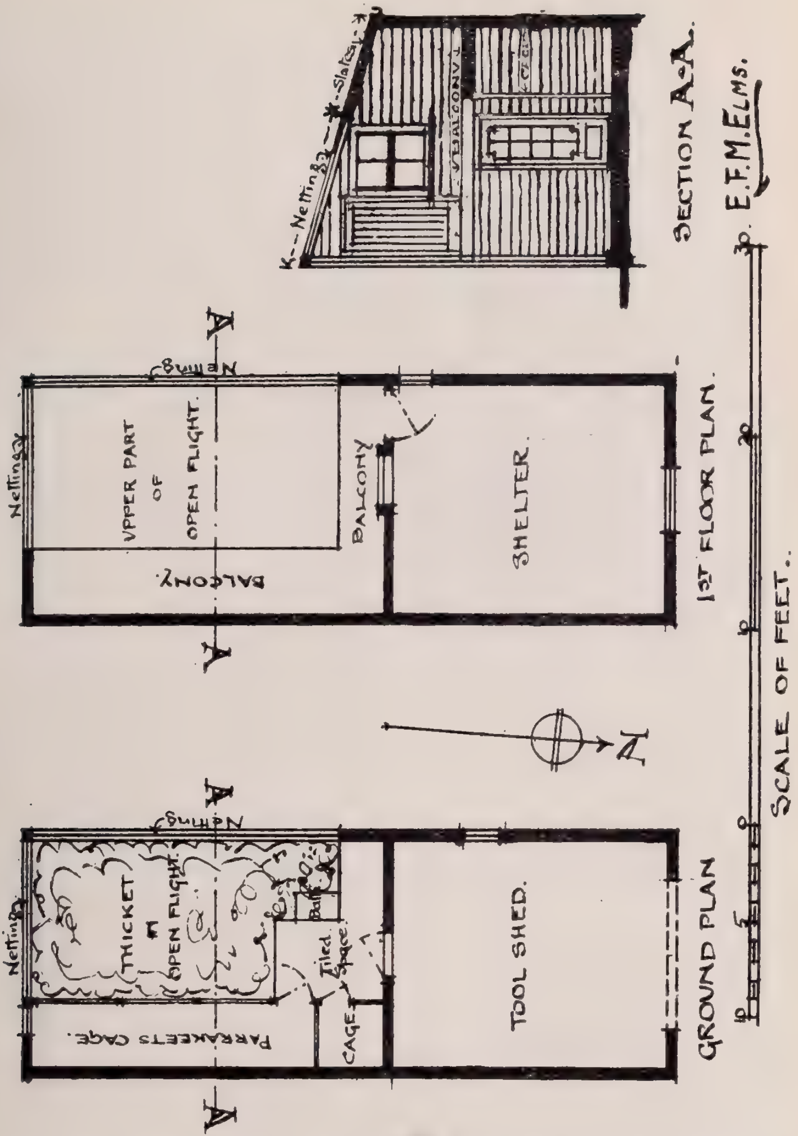
At the first floor level there is a balcony running round two sides over the Parrakeets' cages and the tiled path below: the rest of this part of the aviary is simply the upper part of the open flight over the thicket, it is about 15ft. high, so the birds have plenty of space for flight. The other portion of the first floor over the tool-shed is the shelter, entered by a door and window from the balcony. The weather boarding to open flight, as shown on plans, was removed on West and South sides; the old studs were creosoted and then covered with half-inch netting. The slates were removed from the



Ducorps'
Cockatoo
(*Cacatua
ducorpsi*)

Photos by
S. Williams,
F.Z.S.




SECTION A-A.
Netting
Slates
BALCONY
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A
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BALCONY
BALCONY.
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1ST FLOOR PLAN.
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THICKET IN OPEN FLIGHT.
Bath
Tiled Space
CAGE
PARRAKEETS CAGE.
TOOL SHED.
GROUND PLAN
10
5
0
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30
SCALE OF FEET.
E.F.M.Elms.

roof over open flight, and the battens and rafters covered with netting, but the portion over the balconies was left as it originally was, *i.e.*, covered with slates. I have thus combined shelter and covered and open flights.

I think it ought to answer well, as it is well sheltered from the north and east, and catches the sun somewhere during all hours of the day.

The above description and the plans should make all the arrangements clear. There is nothing to record regarding the birds in this, as the birds have but recently been transferred thereto.

1913 IN THE OLD AVIARY: The season was a very mixed one and brought many disappointments.

Cockateels.—For the second year in succession these failed to hatch out; the eggs, three in number, apparently infertile, on being opened, were found to be dried up.

White Java Sparrows.—These built a large nest in a covered box, depositing three eggs therein, but the hen, after incubating for some time, was found dead in the nest.

Senegal Doves.—These nested three times the nestlings did well until they left the nest, whereupon they all went "wrong" in the legs and eventually died. The nest—of the flimsiest construction—was built in the remains of an old Xmas tree in the shelter, which is quite a dry place, so that the trouble cannot, I should think, have been damp and cramp. I fancy the old birds were too anxious to go to nest again and neglected their progeny, which then developed rickets or something similar.

Chaffinches.—Built a perfect nest in a box bush, and out of a clutch of three eggs hatched out one chick, which died almost at once.

Hybrids.—My fine cock Bullfinch, after flirting with a hen Chaffinch, eventually settled down with a hen Linnet as partner. She built a nest in some ivy and laid three eggs, but the nest was pulled about by some other bird. However, she built again in a box bush, sat patiently for a month and then gave up—the eggs being infertile.

A cock Black-headed Nun mated with an odd hen Zebra Finch, built a nest in a covered box, and laid three eggs; of these two hatched and did well until nearly fledged, when for some reason they died. In the nestling plumage they resembled their mother and did not appear to show any trace of their male parent.

Zebra Finches.—These did fairly well as usual, and would have done even better, but for their habit of laying in the nest again before the previous brood had flown, These are all episodes of the old aviary and, with the usual optimism that sets in about this time of the year, I now look forward to better happenings in the new aviary this season.

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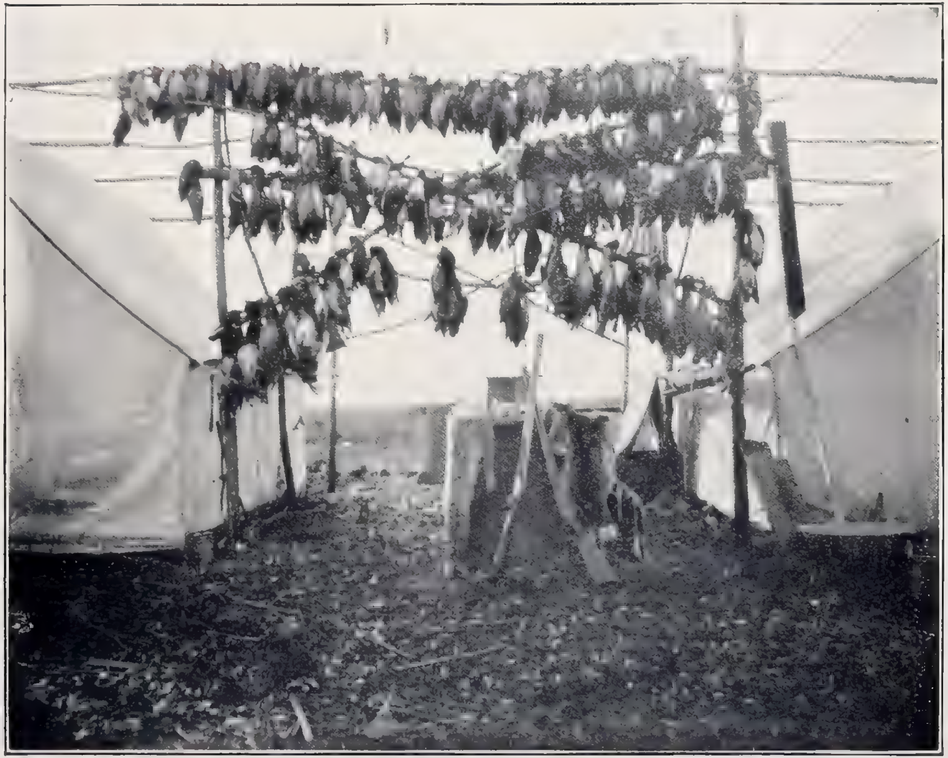
The Birds on Buena Vista Lake, Southern California

By Wm. Shore Baily.

(*Continued from page* 57).

The White Brant (*Chen hyperborea*) or Snow Goose is one of the commonest birds on the Lake. Its pure white body and black wing tips make it a very conspicuous object. The Black Brant (*Branta nigricans*) are about the same size, and might easily be mistaken for miniature Canadas. A flock of Canadas (*Branta canadensis*) were sleeping further out. These are quite twice the size of any of the other American Geese, a gander easily weighing 15 lbs. All these Geese do an immense amount of damage to the grain and alfalfa fields. At certain times of the year, the ranchers have to employ a small army of men to destroy them. Whilst I was looking out on the lake my little dog had been busy hunting on its own account in the bushes, and he presently proudly brings me back a Cotton-tail Rabbit. There are two varieties of these little animals. One exactly like our English Rabbit but about half the size, and the other still smaller, of a bluish-grey colour, and without the white tail. The dog next put up a flock of Quail. These birds are very numerous all over the State, and one finds them in all sorts of surroundings. In the mountains, there is another handsome variety, also crested, but equal in size to our English Partridge. I do not know its local or scientific name. The call is like that of a hen Turkey. The sun was now near setting, so selecting a sheltered spot, I soon had a fire going, and a comfortable bed of dried tules prepared. The Cotton-tail proved a welcome addition to our supper, which consisted of flapjacks, preserved fruit, and coffee. In these latitudes there is hardly any twilight, and although it may seem absurd to us in England to go to bed at 7 o'clock, when camping out there is really nothing else to do. Wrapped in my blankets on a soft bed of tules, with the little dog to keep off hogs and other vermin, I was comfortable enough. The cries of the various waterfowl, most of which are night feeders are much more noticeable by night than by day. I could plainly distinguish the various calls of Mallard, Teal, Wigeon, Shovellers, Gadwall, Pintail, Coots, Moorhens, Night Herons, Bitterns, and many others, while the occasional unearthly scream of a wild cat—no doubt feeding on some of the stranded Carp--came up from the southern shore. Every now and then a dead silence would come over the Lake, only to be broken a moment later by an increased clamour of squawks, quacks, and whistles. I have never been able to explain these sudden silences. The birds seem to stop calling as if on a given signal. After a good night's rest, I was up at the first glimmer of dawn, and after a cup of hot coffee and the remains of the previous night's supper, I set out again, having the longest half of the journey still to make. Around the point, on a broken down bunch of tules, I surprised an old coon, who had evidently eaten the best part of a 20lb. carp. These animals are excellent swimmers, and it didn't take him long to reach the shore. A Harrier, looking for breakfast, skims close by me. I see its eye fixed on the wooden decoys in the bow of the boat, but it thinks better of attacking them, and go off in pursuit of a passing flock of Teal, a useless chase unless there should be a crippled one amongst them. From around the next point comes the well-known trumpeting of Swans. Their call might easily be mistaken for the distant sound of a pack of hounds when in full cry. Over a hundred of these birds were feeding in the shallow water some three hundred yards inside of me. On seeing the boat they separated into families; the two old birds, with from three to four young ones, seldom more, and easily distinguishable from their parents by their darker colour. As I approached nearer, flock after flock took wing, and made for the open water, where they usually spend the day. I was now nearing my friends' camp which was situated at the mouth of the Kern River. Here the northern belt of tules commences, extending right across the Lake a distance of ten miles. I found my friends busy making preparations for a trip into Mexico, so after a short stay I set off for camp. The belt of tules through which I was now passing, varies in width from a half to two miles, and shuts off the northern



A Hunter's Camp at Buena Vista Lake showing Ducks ready for shipment feeding grounds from the open waters of the Lake. In this wilderness are enclosed innumerable open spaces or ponds, varying in size from an acre or less to over one hundred acres, and joined to each other by narrow water-ways. These open spaces are the haunts of numberless water fowl of every description, which as soon as the shooting season is over, become extremely tame and confiding. Teal and Shovellers were everywhere feeding upon the seeds of the tules. Red-headed Pochards and Scaup or Blue-bills (*Marila marila*) as the Americans call them, were found in every pond. Sleeping upon a broken down bunch of tules were a pair of Cinnamon Teal (*Querquedula cyanoptera*), which only took wing when my boat was within twenty yards of them, and then alight again in the near distance. On passing from one pond to another, I noticed a small flock of Wigeon—a rather different bird to our English Wigeon—not so common as some of the other Ducks out west. These Wigeon were, I found, waiting on a small flock of Canvas-backs that were diving in their midst. As soon as a Canvas-back appeared from the depths with some waterweed in its beak, the Wigeon made a dash at him and probably secured half of it. Moving on quietly without disturbing them, I noted a Bittern fishing from a ledge of tules. On seeing me it pointed its beak to the sky and stiffened its body. With a few strokes of the paddle, I gave the boat sufficient impetus to reach him, and as it glided silently by, reached out my hand and touched its body, waking him up rather rudely. They differ, I believe, from the English bird, but are very similar both in appearance and habits. Their breeding call resembles the sound made by oars in ungreased rowlock. I have more than once been fooled by them. A little further on I came across a colony of Night Herons busy preparing their nests. The big Grey Heron does not nest in the tules, but selects the tall cotton woods on the banks of the river. I was now near Pelecan Island, so decided to stop and stretch my legs. The island is only a few hundred yards long and in no place more than six feet above the water. Here the Cormorants and Pelicans raise their young. The island is heavily coated with guano, and as the smell is extremely powerful ,a very short stay proved enough for me. On leaving the island I had to thread my way through a submerged forest of willows. Some were standing 20ft. or more out of the water, making splendid resting places for the Gulls and Cormorants. On one tall branch, a large light coloured bird was perched, which on a nearer approach, proved to be an Iceland Falcon, the only one of its kind I have seen outside the Zoo. It suffered me to approach within thirty yards before it took wing. With the sun shining on it, it looked quite white, and nearly twice the size of a Peregrine. It was now getting towards lunch and siesta time, so I selected a bunch of tules, where I could get a good view of one of the larger ponds and tied up to the boat. After a well-earned lunch, I followed the example of the rest of the animal kingdom in my neighbourhood and prepared for a half hour's sleep. Whilst half-dozing I was amused by the antics of a little Rail, which kept on popping in and out of the boat. Had the dog not been there I have no doubt that it would have run all over me, as they are very fearless. It is considerably less in size than the English Water Rail, but similar in colour. Another little bird to pay me a visit was a Wren, As far as I can remember it was exactly like our Jenny, but I have never seen it in California except in the tules, where it breeds, so I must conclude that it is a different species to ours. In the middle of the pond a small flock of Red-breasted Mergansers (*Mergus serrator*), were now feeding. I couldn't help noticing how different they were in this respect from the other diving ducks. The Canvas-Backs, Red-heads, etc., nearly always reappear within a few yards of where they have dived, while the Mergansers pop up sometimes fifty or sixty yards from where they went down. This little flock were feeding on young white fish. Nearer to me a pair of Gadwalls were looking for a building site. These and the Wigeon and Pintail are grass feeders, and spend much of their time on the marshes and irrigating ditches. After an hour's rest, I decided to push through to the feeding grounds, where the water is shallow, and I could use the pole. On the way I almost ran on top of a flock of Grey Geese. These are not nearly so common as the other three varieties mentioned, the flocks seldom exceeding a dozen birds. From the black bars across the breast, I took them to be White-fronted (*Anser albifrons gambeli*). Thousands of Coots (*Fulica americana*)—without doubt the commonest bird on the lake—

scuttled into the tules. Moorhens, mostly in pairs, beat a more leisurely retreat. These differ from our bird, in having a rather larger shield upon the forehead. As the water shallows the tules stand higher out of it, and many of them were now quite twelve feet high and it was very hard and hot work forcing a way through them. At last I got out but found comparatively few birds upon the feeding grounds. In the season at daybreak, the Ducks literally darken the sky, when they leave for the open water, and the noise of their wings sounds like half-a-dozen express trains dashing through a tunnel. A pair of Greenshanks were feeding on a near by mud-bank. These birds were uncommon and I have never seen more than one or two together. In the shallow water and with the pole I now made good progress. Most of the birds passed, were the same as those already described. Very noticeable, however, were the fish-eating Snakes, of which there were hundreds. In some places a dozen or more were wrapped up together, enjoying the heat of the sun. They seldom exceed 6ft. in length, but can easily swallow a 4lb. fish. I also passed a good many Terrapin. These are about as big over as a tea plate and are much sought after for the city markets. As I got near the eastern shore I noticed a flock of dark Waders. These turned out to be Bronze Ibis, and they contrasted very prettily with their companions, Herons and Egrets. These birds allowed me to pass within fifteen yards of them before they walked quietly away. I am informed that both varieties used to breed upon the lake, but they have not done so of recent years, owing to the persecution of the plume hunters. On the way up the canal to camp I passed an immature Great Northern Diver. I have never seen the old birds out there. Too far south, I suppose. It was now nearly sun-down, and thousands of Redwinged (*Agelaeus phoniceus*), and Yellow-headed (*Xanthocephalus xanthocephalus*) Starlings were returning to roost in the tules. The noise they make at roosting time, closely resembled the murmur of our English birds.

In conclusion I would say that there are many other varieties of birds on the Lake that I have not mentioned, and to anyone fond of ornithology, a month or two on Buena Vista would make an ideal holiday.

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Freely Imported Species.

THE SILVERBILL.

By H. Meakin.

The Silverbill is one of the most freely imported species of foreign birds, yet it is one of the brightest and most interesting, one of the easiest to keep and acclimatise, but at the same time one which has been written about probably less than any other. There are two species, the African (*Aidemosyne cantans*) and the Indian (*A. malabarica*). Both are very much alike in colouring, and probably exactly so in habits, disposition, etc. For some occult reason, however, the Indian species is much less frequently imported than its African cousin, and commands a correspondingly higher price. In spite of this, both species are grouped together at shows under the heading of "Common Seedeaters," with the result that seldom either is exhibited. Last year a pair of *A. malabarica* was shown by Mr. Watts, and not only captured the first prize, but also the hearts of all who had the good fortune to see them.

Description: The Silverbill may be briefly described as a small bird, slightly longer and slimmer than the Australian Zebra Finch; its beak, which appears almost too big for the body, is of a dull grey (leaden-silver) colour; above, its body is tawny-grey in colour, but below it is cream—almost white. The male has a sweet little song which it keeps up all day long, especially in the house, flapping or rather distending its tail with a fan-like motion all the time. The hen has no song, and her beak is said to be a shade narrower than that of her mate, but it requires a good eye and perhaps a "sympathetic imagination" to notice the difference; song is the best test of sex. The Indian species differs in being darker and having less markings on its back, whiter cheeks, and also the rump and upper tail-coverts are white.

New arrivals. Newly imported specimens do not give anything like the trouble that Firefinches or Cordon Bleus do. They are generally in good condition and the males commence singing within an hour of being taken from their travelling box. This, however, is no reason why proper precautions should not be taken. All new arrivals should be put in cages away from other birds until a fortnight or three weeks has elapsed, when, if looking "fit" they may be allowed to mix with acclimatised birds. Those imported in autumn or winter will not, of course, be put in the out-door aviary until the following May, and then only during what looks like a spell of settled weather.

Breeding, etc. All my experiences are confined to the African species. I well remember some years ago seeing a pair—or rather a couple—of small foreign birds in a local bird-catcher's window. He said they were a true pair of Bengalese Finches, but as he only demanded eighteen pence for them I invested that amount. The next morning one of them began to sing, but the other sat with its head under its wing, and I soon came to the conclusion that its mission on earth was at an end. It was a little brown bird with a black head, but it was not until I purchased our Editor's "Foreign Birds for Beginners," that I discoevred the "Bengalese Finches" were a Silverbill and a Black-headed Nun. So much for a bird catcher's knowledge of ornithology. This Silverbill lived in an ordinary wire Canary-cage, for a long time, in perfect health, always ready to sing. The only time it ever looked "seedy" was when I tried to make it spend a week-end without any white millet. It certainly never got "finger-tame" but soon ceased to flutter when any one went near it, and was a source of pleasure and amusement to everyone in the house. After that I bought several more birds including Bengalese (real ones this time), Waxbills of various sorts, and a Pekin Robin. With all these the Silverbill was on good terms, ready at all times to sing or make love to any who offered him the least encouragement. When they they were put into a small out-door aviary, *A. cantans* thoroughly enjoyed himself. He examined every corner, bathed himself, and danced about as though he had found himself once more in his African wilds. One day I saw him dancing and singing round a big Barbary Dove.

It was not until about Christmas time 1912 that I managed to secure a hen Silverbill. This was one which had nested in the aviary of a friend in Luton. The pair spent the winter indoors in a box-cage about twenty-four inches long, eighteen high, and fifteen wide. When spring came they were duly put into the aviary and at once set about nesting. After every box, husk, and nest had been examined, they decided in favour of an oblong box, eight inches long and five inches high and wide, with a hole in the front. Grass and hay, and in fact any bits of rubbish, such as string, paper, and millet spray stalks, were carried in until the box was nearly full. Then five small white eggs were laid. These were duly incubated, until a most irritating accident occurred. Among the inhabitants of the aviary was a Nuthatch. This was a very amusing bird, always on the move, running and climbing about like a little blue mouse. However, one day I went into the aviary and no Nuthatch was to be seen. I searched high and low and began to think there was some little hole from which he had escaped. All at once I heard a scraping in the Silverbill's nest-box, and found there the missing bird, sitting among the egg shells. He no doubt had been trying to hatch them, but I took care he didn't have another chance.

The Silverbills were soon at work again, and before a week had elapsed, they commenced laying another clutch. This time all went well and in about six weeks time I had the pleasure of seeing four little Silverbills leave the nest, looking the image of their parents—perhaps a trifle lighter in colour. When they hatched (after twelve days' incubation), they looked most disgusting. Most birds at that stage look rather uninviting, but, these were more like slimy reptiles than birds. They were fed most assiduously by their parents, almost entirely on millet seed. I never once saw them during that period touch green-stuff of any description, and insectile food they never partook of at any period. For a fortnight at least the young Silverbills were fed by their parents; it was most amusing, also, to note how they were "put to bed" every evening about five o'clock, and how anxiously the parent Silverbills fluttered about, when one evening their children insisted on spending the night on a perch instead of in the nest box. After a short time, the Silverbills "began again." Five eggs were laid, and then occurred an incident which was the prelude to a series of annoying occurrences. One day, while in the aviary I accidentally knocked over the nest-box and of course broke all the eggs. Most unwisely, I threw the egg-shells on the floor and left them there. In a few days the Silverbills pluckily commenced yet again. Two eggs were laid, and then disappeared. About this time other birds' eggs disappeared in the same irritating fashion. Zebra Waxbills had nested and their four eggs were minus one morning. A pair of Greenfinches also suffered. I of course cast my eye round for the culprit. A fine, loud-singing Pekin Robin was the first suspect, and he was removed. Still eggs disappeared. Then a Bramblefinch and a Chaffinch came under the ban, but all to no purpose. At last I caught the thief "in the act." It was an innocent-looking Linnet. No doubt he had eaten the eggs which, as previously mentioned, were thrown on the floor, and so had acquired the taste. *Moral*: Don't leave eggs or egg-shells lying about.

By this time the Silverbills were feeling rather sore, and did not go to nest again for some time. At last they chose an old custard-powder tin hanging up in the most exposed part of the aviary. Four eggs were laid, and all went well. In due time they were hatched, and then occurred a very sad event. When the young birds were only a week old, Mr. Silverbill died. Mrs. Silverbill, however, stuck to her duties, and reared three of the youngsters. They were very small and weakly, and were not independent for nearly two months. From this, I think it will be gathered that *A. cantans* are interesting birds and worthy of a place in any aviary. Never still, never quarrelsome or bullying, always ready to sing, easy to acclimatise, and ready to breed, they are ideal birds for cage or indoor aviary; but of course, to see them at their best, they must be put where there is some grass, reeds, or bushes, and there, flitting about from twig to twig, they form a picture not easily forgotten.

Silverbills form a very good subject for hybridising. According to a list compiled by our esteemed Editor, it has been successfully crossed with the Bengalese, Bib, Chestnut-breasted, Olive, Spice, Striated, Sharp-tailed, and Zebra Finches, as well as, with the St. Helena Waxbill and the White-headed Nun. I am sure if those who have been so fortunate as to breed these hybrids, would send descriptions of them to "Bird Notes" it would be of general interest.

Birds of the Jhelum District.

By H. Whistler, I.P., M.B.O.U.

ORNITHOLOGICAL NOTES FROM THE PUNJAB.

Our various periodicals on Natural History contain so many diaries on bird observation in the British Isles, that it may possibly be of interest to our members to read a similar diary from India, as from it some idea may be gained of the richness of the material that lies ready for the observation of the Ornithologist in that country.

Although the notes from which this calendar was compiled were written up daily I have thought it better to write up the calendar at the end of the month, so as to gain a better perspective of the relative importance of the notes made: this will account for various observations which would otherwise seem a little like prophecy! I regret that the exigencies of time and distance do not allow the notes to appear in the month following that to which they would refer; it would then have been more interesting for comparison with the almost contemporary conditions in England.

Unless otherwise stated all notes refer to the immediate neighbourhood, of Jhelum City, situated on the River Jhelum, and headquarters of the Jhelum district, which is bounded on the north by Rawal Pindi district and Jammu Native State (at the foot of the Himalayas), and on the south by Gujrat district. Within half a mile of my bungalow is a Government Reserved Forest Block or Rak, situated on the right bank of the river. This Rak and the River beside it are an ideal collecting ground. Otherwise the immediate neighbourhood is chiefly cultivation on sandy soil with scattered trees.

The nomenclature is mainly that of Blandford and Oates, *Fauna of British India—Birds*.

Jan. 1.—One of the most interesting features of bird life at present is the enormous quantities of Rooks and Jackdaws which come to roost nightly in the Government Forest Block near my bungalow: these birds arrived in the district in the middle of October, obtaining their full strength of numbers by the end of that month; and from their first arrival they came to roost in company with the House Crows (*Corvus splendens*) which sleep in the Block all the year round.

The stream of birds arriving to roost starts about two hours before sunset, the House Crows being the first to arrive; the Rooks and the Jackdaws keep together, and arrive as a rule apart from the Crows, some of the bands coming at a tremendous height. When the weather was warmer the sand-banks of the River Jhelum, which runs alongside the Block, were black with the numbers of birds that settled for a final drink; but now that the weather is cold this "night-cap" is mostly discontinued.

The return flight starts shortly before sunrise, and lasts but a short time, the birds departing more *en masse* than they arrive.

The Rooks belong to the sub-species *Corvus frugilegus tschusii,* Hartert; differing from our English bird in its smaller measurements and the shape of the bill. The Jackdaw, which is much less abundant than the Rook and the shyest of all the species in the Block, is *Coloeus monedula collaris* (Drummond); this race differs from our bird chiefly in having a crescent of fine white on the sides of the neck; but this feature is somewhat variable.

Jan. 2. There are still a fair number of Starlings (*Sturnus vulgaris pollaratskyi,* Finsch) about; but their numbers steadily decrease towards the end of the month; they arrived towards the end of October.

An adult ♂ Spotted Dove (*Turtur suratensis*) obtained; a rare straggler here, although common in other parts of India.

In the Forest Block I shot a ♀ Red-flanked Bush-Robin *Tarsiger rufilatus* (Hodgs.), which is very rare at this low elevation (827 feet), being a Himalayan species found up to 1,000 feet. Also obtained a specimen of the Grey-headed Flycatcher Warbler *Cryptolopha x. xanthoschistos* (Hodgs.).

Jan. 3.—Went out to look for nests of the Dusky Eagle Owl (*Bubo coromandus*) of which there are three or four pairs in the Forest Block. One was flushed from an untidy and old looking stick nest in a Shisham tree in a dense part of the Block; this was investigated next morning and found to contain half-incubated eggs. The other pairs do not appear to be nesting as yet. A common Kingfisher (*Alcedo ispida bengalensis*, Gm.) seen. A small flock of Blossom-headed Parrakeets (*Palaeornis cyanocephalus*), noted; also three Yellow-fronted Pied Woodpeckers (*Liopicus mahrattensis*).

Jan. 4.—Found a nest containing two slightly incubated eggs of the Indian Tawny Eagle (*Aquila vindhiana*); it was a large untidy structure placed at the top of a medium sized Shisham tree—one of two trees standing together in the middle of a wide expanse of cultivation.

Flocks of the Indian Ring Dove (*Turtur risorius*) on the golf course; a large number of White-backed Vultures (*Pseudogyps bengalensis*) and Griffon Vulture, (*Gyps sp?*) collected and sitting about on the ground. A single King Vulture (*Otogyps calvus*) flying over the river. My Falconer saw and unsuccessfully tried to catch two Saker Falcons (*Falco cherrug*).

I spent the greater portion of the day sailing down the river for about eight miles above Jhelum; here the river is much divided by islands and sandbanks, where there were great quantities of Ducks, sitting either on the sand and stones by the water's edge, or resting on the surface of the water, often allowing themselves to drift rapidly with the current; the majority were Mallard, Teal, and Gadwall. Also there were the greatest number of Ruddy Sheld-drakes (*Casarca rutila*) that I have seen; on one occasion I counted over thirty on the wing together. A single Cormorant (*Phalacrocorax carbo*) was sitting with a party of Duck.

Greenshanks, Common Sandpipers, and few Stints and Ring Plovers (*Ægialitis dubia*, doubtless), and Lapwings were noted here and there, feeding at the water's edge. I also saw one Redshank, and a single Red-wattled Lapwing (*Sarcogrammus indicus*)—the latter, though a common species during the summer, almost entirely disappears during the winter. The Black-bellied Tern (*Sterna melanogaster*) was fairly numerous.

White Wagtails (*Motacilla alba alba*, Linn.) were also seen here and there singly, searching the sandbanks by the water's edge; this species and the Masked Wagtail (*Motacilla alba personata*, Gould) were the only kinds observed during the month, with the exception of a single Grey Wagtail noted below.

In the neighbourhood of some low sandy cliffs were numbers of some species of Sand Martin; they were probably nesting or about to nest there, but I had not time to ascertain for certain.

Some Small Minivets (*Pericrocotus peregrinus*) noted; this species is here a resident and partial winter immigrant, but is not so common as the Short-billed Minivet (*P. brevirostris*) which is only a winter visitor.

Jan. 5.—A party of five Pintail Sand Grouse (*Pteroclurus exustus*) flew over the Police Range in the early morning. Several Blossom-headed Parrakeets in my compound.

Saw what was probably a Sparrow-Hawk (*Accipiter nisus*).

Jan. 6.—Six Cranes (*Grus communis*) were circling for a time at midday above my bungalow.

Two fresh eggs secured by my Orderly from a nest of *Aquila vindhiana* which I found in camp about 30 miles from headquarters on December 14th; on that date there were no eggs, but both birds were present, the female being in the nest, which was situated at the top of a Thorn tree by a roadside.

Jan. 8.—A Grey-headed Flycatcher-Warbler in compound; a Whitethroat (*Sylvia affinis?*) seen. The first Black-throated Thrush (*Merula atrigularis*) noted in the Rak; this is a winter visitor only to the N.W. Punjab, its numbers apparently depending on the severity of the weather. A few were seen on most days for the remainder of the month, either in the Rak or in the District Board Garden; they attract attention by their chattering cry.

By the river at dusk I saw my trained Peregrine, which escaped on the previous day flying in company with a large wild Falcon Peregrine that has been living in our particular part of the Rak since the beginning of November. She is an old bird and has probably been caught and trained sometime, as she knows what our nets mean perfectly well, and will have nothing to do with them!

An immature Sparrow Hawk found haunting a thick patch of cover in the Rak.

A pair of Pied Kingfishers (*Ceryle varia*) are excavating two nesting holes in the river bank by the Rak; both seem to be worked at concurrently!

Shot a red-breasted male of *Muscicapa parva* (Red-breasted Flycatcher)—the species was common throughout the month, but all the others seen were females or males in immature plumage.

Jan. 9.—Two Falcons seen perhaps a Shakin (*Falco peregrinator*) —(see plate)—and a Saker.

A small yellow finch seen but not secured; was possibly the Himalayan Greenfinch (*Hypacanthis spinoides*) which would be a prize at this low elevation.

From a ragged stick nest ,about 20ft. from the ground in a willow-sapling, I flushed a Crow-Pheasant (*Centropus sinensis*). During the month I found the bird on the nest on several occasions, but only in the evening. As no eggs were laid, I conclude the bird used it only for roosting. This is the extreme north-western limit of the species and it is very rare here, the two or three pairs that live in the Rak being the only ones that I know of in the district.

A common Heron (*Ardea cinerea*) fishing by the river. It was seen about the same place several times during the month.

Three King Crows (*Dicrurus ater*) noted; although a very abundant breeding summer visitor, few remain during the winter months; other odd ones were noted during the month.

Jan 10.—A male Pale-brown Shrike (*Lanius isabellinus*) obtained. A large flight of Indus Sand Larks (*Calendrella raytal adamsi*) haunting *a* patch of grassland by the river; they continued to haunt the spot for the remainder of the month.

Jan. 11.—My Peregrine recovered and a wild Tiercel Peregrine seen by my Falconer; also a male Shikra (*Astur badius*)—see plate).

Jan. 12.—Drove out to a ford up the river, and on the way, seeing a pair of Red-headed Merlins (*Æsalon chicquera*), stopped and set up a net with a live Quail as bait; the male came at once and made some pretty stoops without taking the Quail or being himself caught; the female then stooped down and was caught at once; however, one of her claws was missing so I released her, though I had been wanting one of the species for training.

At the same place a pair of Eagles were at a large nest on the summit of an enormous thorn tree, but there were no eggs.

A Lugger Falcon (*Falco jugger*) seen. (See plate).

The birds noted on the river were as on January 4th with the following additions. There were at least 30 Cormorants (*Phalacrocorax carbo*) either sitting on the stones at the water's edge or swimming with their bodies deeply submerged; at one spot three were drying their wings in the sun in the characteristic manner of the species. They were rather shy ,and small parties kept on rising before me, settling again further on down the river.

After carefully manoeuvring my little boat towards a party of small Ducks that were diving persistently in some rather shallow water, I secured one and found it to be a female Smew (*Mergus albellus*)—the first I have met with, though they are stated to be not uncommon in N.W. India during the winter.

From the steep sandy bank of the river I flushed a Wall Creeper (*Tichodroma muraria*)—the first seen in this district north-west of here.

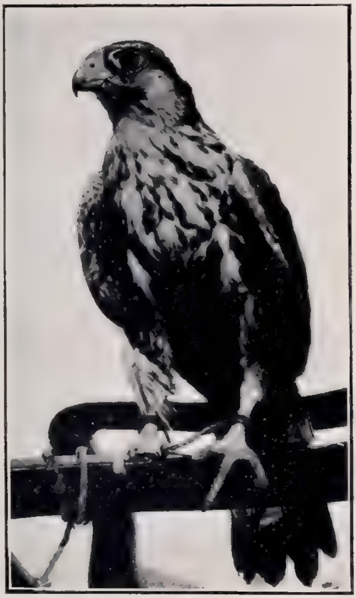
One or two Pallas' Fishing Eagles (*Haliaetus leucoryphus*) about; one took a dead Teal from the water, but I preferred to lose the Duck to shooting the Eagle.

One Warty-headed Ibis (*Inocotis papillosus*), a pair of Lesser Ring Plovers (*Ægialitis dubia*), a Redshank or two, and some flocks of small Waders seen.

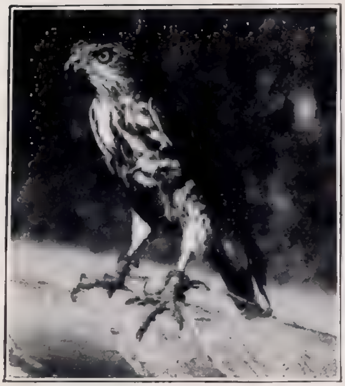
Jan. 13. A White-throated Fantail-Flycatcher (*Rhipidura albicollis*) noted in the District Board Garden: this is a very rare winter visitor here, but I noticed what may have been the same bird with another near the same place on November 5th. The resident species is the White-eyebrowed Fantail Flycatcher (*R. albifrontata*) but its numbers also appear to be reinforced during the winter months.

The Sparrow Hawk (of Jan. 8th) is still haunting the same place, where also to-day was seen a female Shikra (*Astur badius*)—see plate.

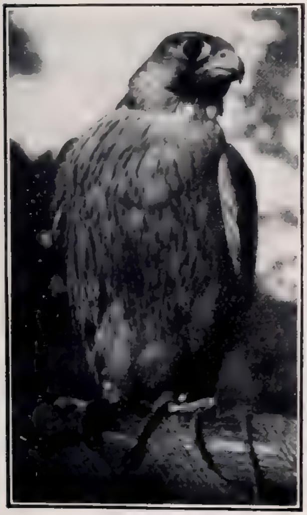
Saw what appeared to be a Carrion Crow (*Corvus corone*) with the Crows in the Rak.



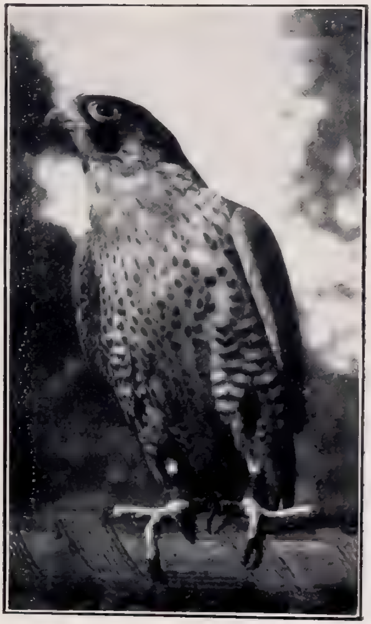
Immature Lugger Falcon
(*Falco jugger*).



Shikra Hawk ♀ in first plumage.
(*Astur badius*).



Shahin Falcon—a bird of
the year—(*F. babylonicus*).



Adult Peregrine Falcon
(*F. peregrinator*).

(*Photos by H. Whistler*).

Jan. 14—Went into camp at Tarki, an outlying spur of the Salt Range. A White-breasted Kingfisher (*Halcyon smyrnensis*)—it seems unusually scarce this year.

Jan. 15. At Taiki, a female Blue Rock Thrush (*Petrophila cyanea*) sitting motionless on a chimney recalled very forcibly the Sparrow that sitteth alone on the housetop—which expression is said to refer to this species; at any rate it forms a better illustration of the meaning than does *Passer domesticus*.

Jan 16. Went to fly the Peregrine at the Sohawa jheel, but there was only a single Pochard and a wounded Teal on the water. The Indian Dabchick (*Podiceps albipennis*) was of course in evidence; a single Heron (*Ardea cinerea*) noted. Flushed a Quail, the only one seen for some months, i.e., after the passing of the autumn migration. *Halcyon smyrnensis* seen Returned to Headquarters; two Cormorants and a King Vulture noted.

Jan. 17.—Large numbers of *Turtor risorius* in flocks on the golf course; this common dove often collects in large numbers during the cold weather. Three Reed Buntings (*Emberiza schoenichlus*) noted—the first this winter; they were in some leafless bushes on grass land by the river.

Large flocks of Small Waders on the mud-flats—they were very shy and I could not secure any, but the glasses showed about half of them to be Kentish Plover (*Ægialitis alexandrina*). Three Cormorants. The adult female Peregrine seen by the Rak again, also a Buzzard that haunted one particular patch of the Rak during the whole month; it does not seen to be the Common *Buteo ferax*, but is probably *B. desertorum*, a race of the English Common Buzzard.

Jan. 18.—Went after the Waders, but only secured a Temminck's Stint (*Tringa temmincki*). The Kentish Plover were not seen.

Jan. 19.—Three Blossom-headed Parrakeets seen.

A pair of Kites (*Milvus govinda*) have again set to work on a nest they started at the beginning of the month, and then left for some reason. A stray Coot (*Fulica atra*) on the river. Two Falcons were seen to swoop together out of the Rak, grapple together, and then separate, one going off to eat something on the sand-banks. They appeared to be a Peregrine, and a Lugger, but I could not be certain.

Jan. 20.—Some Blossom-headed Parrakeets seen. *Liopicus mahrattensis* seen.

Jan. 21.—A party of Small Minivets seen. Also several Himalayan Tree-creepers (*Certhia himalayana*)—a winter visitor seen on most days during the month. It was first noted on October 11th. Usually one or two are seen in company with the large parties of the Indian Grey Tit (*Parus *atriceps*) which was very abundant all through the month. Other small insectivorous birds such as *Phylloscopus* and *Cryptolopha* join these parties, which are here a reproduction on a small scale of the large bands of insectivorous birds that one meets in the hill jungles during the Summer (as related by Major Perreau in the notes on his Indian consignment).

Jan. 22.—Went to investigate the Wren Warblers that were numerous during the month in a thick patch of tamarisk and reeds by the river. They proved to be the Indian Wren-Warbler (*Prinia inornata*). Some ten or twelve Reed Buntings in place where the former ones were met with.

Jan. 23.—Several Blossom-headed Parrakeets noted; also a Grey-headed Flycatcher-Warbler. A nearly completed nest of *Milvus govinda* noted in an enormous tree by one of the city temples.

Jan 24. Walked over the fields of growing wheat, which is now half-way up to one's knees, but not a sign of any Quail having arrived. In the wheat were a few Skylarks, *Alauda arvensis,* chiefly in one flock, and a few smaller Larks which were probably the Indian Skylark *A. galgula*. A sandy-coloured Wheatear and a flock of Pipits, perhaps *Anthus spipoletta,* were other interesting birds seen, but my collecting gun went wrong, so I could not identify the birds seen with certainty.

Indian Rollers (*Coracias indica*) were thinly distributed over the country, but not nearly so numerous as they are in summer, when their numbers are augmented by birds from further south.

There is in my compound a half completed nest of *Milvus govinda*.

Jan. 25.—Again spent the day on the river; birds noted as on Jan. 4th, with the following differences:

A party of Cream-coloured Coursers (*Cursorius gallicus*) were noted feeding and running on a sandy islet near tamarisk and cultivation. A male and female shot had their gizzards full of small grasshoppers. I have only met with Coursers once before in this district, when three were noted on some broken ground at Chakwal on October 23rd.

The Cormorants had nearly all disappeared, only one or two being seen.

A gaggle of about a dozen Geese (not *Anser indicus*) were seen on a sand-bank, but my stalk was spoilt by a passing woman. Although Geese are common a few miles down the river, it is unusual to meet them on this part, above Jhelum.

Redshanks were more numerous than before; the Sand

Martins much less numerous—a fact which probably indicates that they now have eggs somewhere, as this is the breeding season in Northern India.

Very large numbers of Stints mixed with a few Dunlins were feeding on some mud flats; one secured was Temminck's Stint.

A Heron (*Ardea cinerea*) seen in company with a White Egret, probably (*Herodias intermedia*). A collection of Indian River Terns (*Sterna seena*).

Some incomplete nesting holes discovered of the Pied Kingfisher (*Ceryle varia*). A single pale brown Shrike (*Lanius isabellinus*) a female Shikra, and one Grey Wagtail (*Motacilla melanope*) seen feeding by the water's edge.

As I was walking home through the Rak in the evening my terrier rescued a Crow from what was almost certainly a Booted Eagle (*Hieraetus pennatus*).

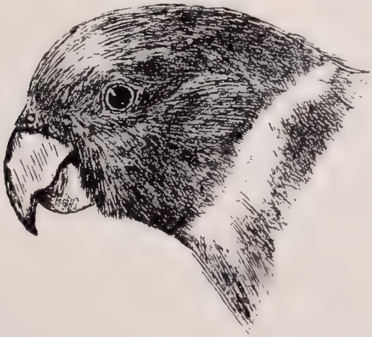
Jan 26. Green Parrakeets (*Palaeornis torquatus*) are now beginning to pair.

Jan 27.—A Red-headed Merlin seen.

Saw what was almost certainly a male Blue-headed Robin, *Adelura caerùleicephala*—a small black and white Chat that breeds at high elevations in the Himalayas, descending lower during the winter. I had been expecting to find it here, as numbers occurred in Rawal Pindi District for a short time during January and February, when I was there in 1911.

A party of Jungle Mynahs (*Æthiopsar fuscus*) noted; there are probably a number about, but it is rather difficult to spot them amongst the hosts of Common Mynahs (*Acridotheres tristis*).

The Little Brown Dove (*Turtur cambaiensis*) is now inclined to collect in flocks. A single male Blossom-headed Parrakeet.



Palaeornis cyanocephatus (*Linn.*). Western Blossom-headed Parrakeet. Jhelum, Punjab, 30/1/'14. ♀

Jan. 28.—During the whole month a cock Indian Stonechat (*Pratincola torquata indica*) has lived close to my bungalow: the species is distinctly scarce at present—the majority having probably gone further south.

Jan. 29.—Some Green Parrakeets were seen drinking from the fire buckets in the police lines. This species drinks freely also from wells and from the river, a fact that may be of interest to our avicultural members, for people are sometimes inclined to give captive Parrots and Parrakeets no water. A flock of some ten Blossom-headed Parrakeets in my compound.

Large numbers of Kites passing in the evening from the city towards the open country; this I have noticed often before.

Jan. 30.—A King Vulture seen; two Grey-headed Flycatcher-Warblers. A number of Reed Buntings in the same place as before. The old Peregrine Falcon seen by the river, and an immature Tiercel sitting in a tree by my bungalow. A flock of Blossom-headed Parrakeets in my compound.

Jan. 31.—Went Hawking over a marsh about 5 miles from Headquarters. Here there were several Geese (*sp. incert*) Ruddy Sheldrakes, Mallard, and other Duck; several old Lapwing, Greenshank, and Green Sandpipers. A single Snipe flushed.

One or two Bay-backed Shrikes (*Lanius vittatus*) were seen—the only ones noted during the month.

The Pied Chat (*Saxicola picta*) and Stickland's Chat (*S. opistholeuca*) noted.

Two adult Lugger Falcons about, but although one came down to my live Quail, it was not netted.

A Harrier (*Circus sp. incert.*) passed over the compound—the only one seen during the month.

During the month the Siberian Chiff-Chaff, *Phylloscopus collybita tristis*, has been very common, its rather melancholy note being heard on every side; the species has a decided predilection for the bank of the river, where it runs beside the Rak. Here the bank is fringed with a tangle of the roots or branches of the bushes that have fallen into the water owing to the erosion, and in this tangle the Siberian Chiff-Chaff delights to hunt, occasionally launching into the air in a very Flycatcher-like fashion.

Another smaller species of *Phylloscopus* with a faint coronal band and a double bar on the wing has also been moderately common, but so far I have failed to identify the species with certainty.

The Indian Redstart (*Ruticilla rufiventris*) has been common throughout the month. The majority seen appear to have been females.

The L.P.O.S. Show at the Crystal Palace.

Though numbers were ahead of recent Shows in the Foreign Section at this venue, they most certainly were not representative of the Foreign Fancy; for this there may be many reasons, two of which we may mention *en passant*: (1) The unsuitability of the historic glass-house for the birds. (2) The lengthy period of the show; it means the birds being away seven or possibly eight days, that is including the period of transit for out and return journeys, and exhibitors who have acquired at great cost and got them into condition by infinite care will not subject rare or delicate species to such a strain, a strain which tries even the most hardy species to the utmost, and this sentiment is becoming stronger with each succeeding year; nevertheless, the Foreign Section was in advance of last year. Under Mr. J. W. Ramsden's fostering care and oversight, the usual excellency of management prevailed. Mr. H. T. T. Camps judged the Parrot Classes and Mr. H. J. Fulljames the remainder.

The Class for BUDGERIGARS AND LOVEBIRDS secured 12 entries, and the awards were as follows:

1 and 3, A. Silver, Green Budgerigars and Madagascar Lovebirds; 2 A. J. Shipton, Yellow Budgerigars; 4 J. Fletcher, Green Budgerigars v.h.c., Shipton; h.c., Frostick; c., A. Silver.

The Class for PARRAKEETS, LORIES, other LOVEBIRDS, ETC., brought together 20 exhibits, a really good lot, and a most trying task for the Judge. Some of these birds were evidently penalised owing to looking out of condition during judging time, a condition which passed away later with some of the exhibits, but, of course, the birds had to be judged as they appeared.

1, Mrs. D. Longden, Red-collared Lorikeet; 2 and h.c., Miss L. Clare, Queen Alexandra Parrakeets and Peach-faced Lovebirds; 3, 5, and v.h.c.,h.c., and c., Miss A. B. Smyth, Purple-capped Lories, Forsten's Lorikeet, White-winged Parrakeet, Black-cheeked and Peach-faced Lovebirds, a charming quintet; 4, Jameson and Johnson, Yellow-backed Lory; extra 5, Young, another Yellow-back; v.h.c., A. Wilson, Red-rump Parrakeet; J. Frostick, very fine Crimson Lory, but showing some pen feathers; h.c., L. M. Wade, Crimson-wing Parrakeet; c., T. Harrison, Alexandrine Parrakeet; L. W. Hawkins, Rosella Parrakeet.

The Class for ALL SPECIES OF PARROTS, ETC., was the best of its kind for some years, containing some good and rare exhibits; some of the latter were not looking their best on the first day of the show, consequently did not fare so well under the Judge's eye as they otherwise would have done. The two rarest were Rev. G. H. Raynor's Aubry's Parrot, and Mr. Moore's Salle's Amazon, the latter being new to the bench; both were rather hardly treated. Miss A. B. Smyth entered a pair of Meyer's Parrots (apparently two cocks, one much younger than the other) as Ruppell's, and the writer took them for the latter at first sight, but on looking up the species this was soon corrected, as Ruppell's are dusky beneath, whereas Meyer's have a considerable amount of green on breast and abdomen. The hen Ruppell's is easily distinguished from the female Meyer's by the deep blue back of the former.

1, v.h.c., and h.c., Rev. G. H. Raynor, Meyer's (the well-known veteran hen, over twenty years old), Red-vented, and Aubry's Parrots in the order given a fine trio, and the latter hardly treated; 2 Miss A. B. Smyth, two good Meyer's Parrots; 3, G. W. Leavers, good Senegal Parrot, but lucky in such company; 4 B. J. Moore, Salle's Amazon (a first appearance); extra 4, Miss Gollan, Leadbeater's Cockatoo; v.h.c. Ditchfield, Blue-fronted Amazon; c., Muscott, pair of Eclectus Parrots.

The Class for CERTAIN NAMED COMMON SPECIES, was also well filled (20 entrants), and were a very even lot, all well known species.

1, Mrs. D. Longden, exquisite pair of Firefinches; 2, v.h.c., and h.c., A. Silver, good pairs of Lavender Finches, Gold-breasted and St. Helena Waxbills; 3, Mrs. Thynne, St. Helena Waxbills; 4, and v.h.c., R. J. Watts, White-headed Mannikins, and Green Avadavats; 5, T. Almond, Bib Finches; h.c. and c., S. Beaty, Combasou and Firefinch; c., Miss Bousfield Grey Waxbills.

The Class for RARER WAXBILLS, GRASSFINCHES, ETC., drew 17 entries, consisting of an interesting lot of well known but beautiful species.

1, J. Chadwick, Red-collared Whydah; 2, J. Frostick, Ruddy Waxbill; 3, S. Beaty, Melba Finch; 4 and h.c., L. W. Hawkins, pairs of Melba Finches, and Blue-breasted Waxbills; 5, Miss Bousfield, exquisite pair of Black-headed Gouldian Finches and Melba Finch; v.h.c., Mrs. Longden, Black-headed Gouldian; h.c., Miss J. A. E. Smyth, Red-headed Finch; c, Miss Thynne, very fine Pintailed Whydah.

The next Class, for TYPICAL FINCHES, BUNTINGS, ETC., also drew 17 entries, and formed one of the best classes in this section, though there is nothing startling to chronicle, save an insignificant looking American Pine Siskin, which, I think, is a first appearance for this species, and the same may possibly be true of Miss Smyth's Black-headed Grosbeaks. The other species have been many times referred to in our pages.

1, E. Hathaway, fine Sepoy Finch ; 2, S. Beaty ; very fine pair of Olive Finches ; 3, T. Almond, exquisite Rainbow Bunting ; 4, Miss J. A. E. Smyth, uncommon pair of Black-headed Hawfinches ; v.h.c., E. Fordred, Virginian Cardinal and Pileated Finch ; h.c., C. E. Gunnell, American Pine Siskin, rare, but very plainly clad in brown, striated with darker brown ; c., G. Oliver, Red-crested Cardinal. Good pairs of Indigo and Nonpareil Buntings, and Cuban Finches also competed.

The Class for TANAGERS, only drew 5 entries, and consisted of beautiful but well-known species; Miss Bousfield's exquisite Festive being well ahead of its competitors.

1, 3, v.h c., and special, Miss Bousfield, Festive, pair of Necklace and Superb, a gorgeous trio ; 2, P. Arnott, Tricolour, one of the best the writer has seen ; 4, Miss A. B. Smyth, Palm.

The Class for HONEY-EATING species was cancelled.

The SMALL, A.O. SPECIES Class only drew 6 entries and contained one bird apparently new to the bench, Mr. Sharples' White-headed Chinese Starling—in appearance it is a typical Mynah. with white head, vinous-grey back, black and white wings, very pale vinous-buff breast, deep yellow bill, legs and feet—a handsome bird.

1 and special, J. Frostick, Japanese Redbreast, in exquisite form ; this is the bird I think, originally shown by Mr. A. Ezra, some two years ago at the L.C.B.A. Horticultural Hall Show, conjointly with another staged by Mrs. K. L. Miller, these two specimens constituting the species' debut in the show world ; 2, R. Sharples, rare White-headed Chinese Starling ; 3 and 4, Miss A. B. Smyth, Shama and pair of Black-headed Sibias ; v.h.c., and h.c., E. Fordred, Pekin Robins.

The LARGE, A.O. SPECIES Class only secured three entries, all have been previously noted in "B.N."

1, Miss A. B. Smyth, uncommon Yellow-headed Troupial ; 2, R. Sharples, Pileated Jay ; 3, Andrews, Bros., fine Glossy Starling.

W.T.P.

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Book Notices and Reviews.

GLIMPSES OF INDIAN BIRDS: By Douglas Dewar, I.C.S., London ; J. Lane, The Bodley Head, Vigo Street, W. Demy 8vo., 7/6 net.

Once again has the able and prolific pen of our member, Mr. Douglas Dewar, given us a most interesting book upon that seemingly endless and enchanting topic, India's huge and wonderful avifauna.

The author does not walk in the usual ruts of orthodox ornithology, but observes, thinks, and records for himself; a Naturalist totally unfettered by the "isms" of any zoological school. This is aptly shown in the concluding paragraph of the Preface which reads as follows :—

"It is not very long since an English scientific paper published an article entitled 'What have ornithologists done for Darwinism?' So long as zoologists test the work of the naturalist by the amount of evidence he collects for Darwinism or any other 'ism,' it is hopeless to expect zoological science to progress."

The book runs into XXXIX chapters and a comprehensive index, we give contents below :—

Chapter I. Birds in a Grove; II. The Magpie Robin; III. The Indian Snake-Bird; IV. Minivets; V. The Power of Animals to Express Thought, VI. Pied Woodpeckers; VII. A Jhil out of Season; VIII. Birds in White; IX. The Pied-crested Cuckoo; X. Vultures; XI. The Indian Robin; XII. The Shikra; XIII. A Finch of Roseate Hue; XIV. Birds on the Lawn; XV. The Grey Hornbill; XVI. The Flamingo; XVII. Summer Visitors to the Punjab Plains; XVIII. A Bird of Many Aliases; XIX. Paddy Birds at Bedtime; XX. Merlins; XXI. The Common Wryneck; XXII. Green Pigeons; XXIII. Bulbuls' Nests; XXIV. Nightingales in India; XXV. The Wire-tailed Swallow; XXVI. Winter Visitors to the Punjab Plains; XXVII. A Kingfisher and a Tern; XXVIII The Red Turtle Dove; XXIX. Birds in the Millet Fields; XXX. Hoopoes at the Nesting Season; XXXI. The Largest Bird in India; XXXII. The Swallow-Plover; XXXIII. The Birds of a Madras Garden; XXXIV. Sunbirds; XXXV. The Bank Myna; XXXVI. The Jackdaw, XXXVII. Fighting in Nature; XXXVIII. Birds and Butterflies, XXXIX. Voices of the Night; Index.

Instead of personal comment to any extent I am yielding to the temptation to partially reprint the first chapter, and leave my readers to judge for themselves.

BIRDS IN THE GROVE :—"The small groves that usually surround hamlets in Oudh are favourite resorts of birds."

"I know of few more pleasant ways of passing an hour than under the trees in such a grove at the beginning of December, when the weather is perfect. The number of birds that show themselves is truly astonishing."

'Recently I tarried for a little time in such a grove consisting of half-a-dozen mango trees, a tamarind and a pipal, and witnessed there a veritable avian pageant—a pageant accompanied by music."

"The Sunbirds (*Arachnechthra asiatica*) were the leading minstrels. There may have been a dozen of them in the little tope. To count them was impossible, because Sunbirds are never still for two seconds together. When not flitting about amid the foliage, looking for insects they are playing at hide-and-seek, or pouring out their canary-like song. At this season of the year the cocks are in undress plumage. In his full splendour the male is glistening purple; but in August he loses nearly all his purple gloss and becomes brown above and ashy grey below, save for a purple stripe running downwards from his chin. The hen is at all times brown above and yellow below."

In like charming manner the author notes the Red-whiskered Bulbul, Doves, and Indian Redstart.

"At intervals, a curious *tew* emanated from the foliage. A short search reveals the black-headed oriole (*Oriolus melanocephalus*), a glorious golden bird, head and neck black, and some black on the wing. This creature never seems to descend to the ground ; it dwells always in the greenwood tree and its life is one long search for fruit, caterpillars and other creeping things. . . . . . . First and foremost the fan-tailed flycatcher (*Rhipidura albifrontata*) the prima donna of the tope—presented herself. Like a fairy in a pastoral play, she comes into view from some leafy bower, announcing her appearance by five or six joyous notes that mount and descend the musical scale. . . . . . she is a dancer as well as a singer, and she pirouettes up and down a horizontal branch, bowing now to right and now to left, spreading her tail like a fan and suddenly breaking off her dance to make a flight after an insect."

Similarly are introduced Tickell's Blue Flycatcher (*Cyornis tickelli*), Red-breasted Flycatcher (*Siphia parva*), Grey-headed Flycatcher (*Culicicapa ceylonensis*), Crow Pheasant (*Centropus rufipennis*), etc.

"I returned to the mango tree beneath which I had been standing, and in so doing disturbed a bee-eater (*Merops viridis*) that was perching on one of the lower branches. . . . . . . The calls of blossom-headed parrakeets (*Palaeornis cyanocephalus*), far softer and mellower than those of the rose-ringed species, had at frequent intervals mingled with the notes of the other birds. . . . . . Sharp sounds, like those made by insects, issuing from every tree, revealed the presence of warblers. . . . . . At intervals the *to-wee to-wee* of the tailor-bird (*Orthotomus sutorius*) had rung out clear and distinct from the medley of sounds that filled the grove. . . . . . . I have omitted to mention the sprightly magpie robin (*Copsychus saularis*). . . . . Having spent an hour in the grove, I had to return to my tent to work without having witnessed al the *dramatis personae* of the daily pageant. As I was leaving the tope a hen brown-backed robin (*Thamnobia cambaiensis*) hopped out of an *arhar* field and stood beneath a mango tree, carrying her tail erect so as to display the red undertail coverts."

We only regret that space has not permitted us to quote the whole chapter, and can only add, procure the book and read it in its entirety. There is not a dull paragraph in it—it will please, interest and instruct, whether or not we agree with the author's deductions from the personal observations and field notes he has marshalled together. To the aviculturist it will specially appeal, as it deals with so many species, which inhabit our aviaries, and tells of their haunts, habits, and demeanour both in the wilds and gardens of India.

We cordially recommend "Glimpses of Indian Birds" to our readers as a valuable addition to their bookshelves.

Books Received: Condor, Report of the Giza Zoological Gardens, Bulletin of Menagerie Club, Bulletin of New York Zoological Society, etc., to which we hope to refer in next issue.

◆

Correspondence

HAND REARING OF SWIFTS.

Sir,—It may interest some of my fellow-members to hear how I brought up some Swift nestlings last summer. Swifts in this country are considered excellent for eating when not yet out of the nest and laden with fat. The law, however, forbids birds being taken from the nest, and the Florentine Municipal Guards confiscated a cage containing 25 young Swifts, probably destined for the market. The authorities sent the birds to the Society for the Protection of Animals and from thence they were brought to me, to do what I could for them. My heart sank when I saw the poor helpless creatures huddled together in a dark heap, and I expected to see them die of starvation one after another, and thought that a dose of chloroform would be the most merciful way of disposing of them. I began by trying a little milk, but anything liquid seemed to choke them and it came out of their nostrils. Then I had some bullock's heart chopped up very fine, but it was very sticky and stuck in their throats. I then dipped it in water and added dried ants' eggs also dipped in water, and on this they thrived very satisfactorily. We fed them four times a day, and it took about an hour and a quarter each time. A few days later 20 more Swifts were sent me in the same way and I pursued the same plan. As soon as the young birds lost their infant fat and their wings were strong enough to fly we launched them into the air from the roof of the house. Of the whole lot (45 birds) only eight or nine died, and of these one was dead when it reached my house, two had broken wings, and the others were perhaps too young to rear.

It was a great pleasure to see them soaring in wide circles in the free air, after having taken a good deal of trouble in saving them from starvation.

GIULIA TOMMASSI BALDELLI.

4, Via Silvio, Pelico, Florence, Italy.
13-ii.-'14.

HOMING INSTINCT OF BIRDS.

Sir,—On Sunday last I had a remarkable experience with my small Finches and Waxbills.

Through an oversight the door of my garden-aviary was left wide open, when noticed I found that all the little birds had escaped and were flying about the garden; I was naturally in despair, especially as a gale was blowing from the S.W., and the little mites were soon carried away out of sight over the adjacent gardens. After about three hours wandering up and down the garden in a most unhappy mood. I noticed my three Cordon Bleus were in the garden again, and

I at once scattered some seed about the aviary door and inside, and very soon they went in. I quickly closed the door and very soon had them shut in the inner flight and the outer door open again, while I began to feel a wee bit more cheerful. The next to arrive (now pouring with rain) was a Lavender Finch, and the above process was repeated with success, and a similar result attended the return of a pair of Grey Waxbills. By this time, though nearly wet through, I was feeling decidedly more cheerful and wondering at the intelligence of these wee mites, as I had seen them, when making enquiries, some three or four hundred yards away from the aviary.

I at last listened to the entreaties of my wife and went in to dinner, but before I had commenced I saw from the dining-room window that the Orange-cheeked Waxbills were in the garden again, so, of course, I had to go out and hold myself in readiness to close the aviary door, which I was soon able to do, I am pleased to say.

There were now still at large four Zebra Finches, two Bengalese, and a pair of Tri-coloured Nuns; towards the end of the afternoon I observed the last-named hovering round the aviary, but they seemed unable to find the entrance, and after a time they were carried away by the wind again and I saw nothing more of any of the birds that day.

Next morning, while I sat at breakfast, the Nuns again appeared on the top of the aviary, much to my surprise, as I thought after a night in the open with nothing to eat they would probably have met their fate; after a time they went into the aviary and were soon enjoying a hearty meal. I was away all day, but understand that none of the others put in an appearance, so must mourn them as lost for ever, to me, I suppose.

Of the sixteen birds that escaped ten have returned of their own free will, none of whom seem any the worse for their experience.

I wonder if any other members have had similar mishaps and with what result.

H. P. GLOYNS.

Hampton Wick.
11-ii.-'14.

◆

Post Mortem Reports.

Vide Rules (See Page iii of Cover.)

DEAD BIRDS FOR *Post Mortem* EXAMINATION RECEIVED DURING THE MONTH ARE REPORTED UPON IN THE FOLLOWING ISSUE OF "BIRD NOTES."

DIAMOND DOVE. (W. E. Teschemaker, Teignmouth, Devon). The cause of death was pneumonia, which commonly arises during transit. The remains were in a very good condition but the crop did not contain any food.

Pintail Nonpariel. (W. T. Rogers, Brentwood). The cause of death was pneumonia. They are very difficult birds to acclimatise in this country. Probably 99 per cent. succumb before they have been here three months.

Pekin Robin. (Mrs. Turner-Turner, Beaulieu, Hants). There was a cheesy mass near the syrinx. The lungs and liver were full of extravasted blood, no doubt due to rupture of the blood vessels, arising during the time the bird was being killed.

Goldfinch. (J. E. Ogg, Cockburnsprutt, Berwickshire). Cause of death, amyloid degeneration of the liver.

Long-tailed Grassfinch (♀). (Dr. E. C. Sprawson, Highgate). Cause of death, fatty degeneration of the liver.

Black-headed Gouldian Finch (♂). (R. E. Simpson, Armley. Leeds). Cause of death, intense pneumonia.

Malachite Sunbird (♀). (A. Ezra, 110, Mount Street, W.) The kidneys had undergone fatty changes. No doubt death was due to syncope.

Hartz Canary (♀). (Miss M. M. Jackson, Harrogate). There was intense anæmia. The skin was affected with eczema.

White Java Sparrow (♂). (Mrs. Lamb, Worting, Basingstoke). The cause of death was "bird-fever," which is very contagious. The spleen was enlarged five times its normal size. Isolate and disinfect. The disease is very prevalent just now.

Black-cheek Lovebird (♂). (W. H. Frith, 1 Agnes Road, Northampton. There was a catarrhal condition of the throat.

Answered by Post:—Dr. Lovell-Keays (3).

H. GRAY, M.R.C.V.S.

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Errata.

Page 20, line 17, for "(*Conures*," read (*Conurus*).

Page 21, line 9, for "In ten hours" read "In two hours."

Page 21, line 13, for "absolutely apparently dead," read "apparently absolutely dead."

Page 28 Re Himalayan Siskin. Unfortunately by some means the following paragraph :—

"Mr. Goodchild's characteristic drawing gives an excellent idea "of the general colour pattern, and if the darkest parts are taken "to represent black tinged with green, medium parts greenish "brown, and the light parts canary-yellow, a good general idea of "the colouration is gleaned,"

got transposed ; it should have appeared on page 3, as it refers to the Sikhim Siskim (*Chrysomitris tibetana*), the bird figured on the plate.

Page 33, line 3: for "1912" read "1913."

Page 35. line 14: for "small" read "Small."

Page 35, line 21: for "1912" read "1913."

Page 41, line 5 from bottom: for "dubous" read "dubious."

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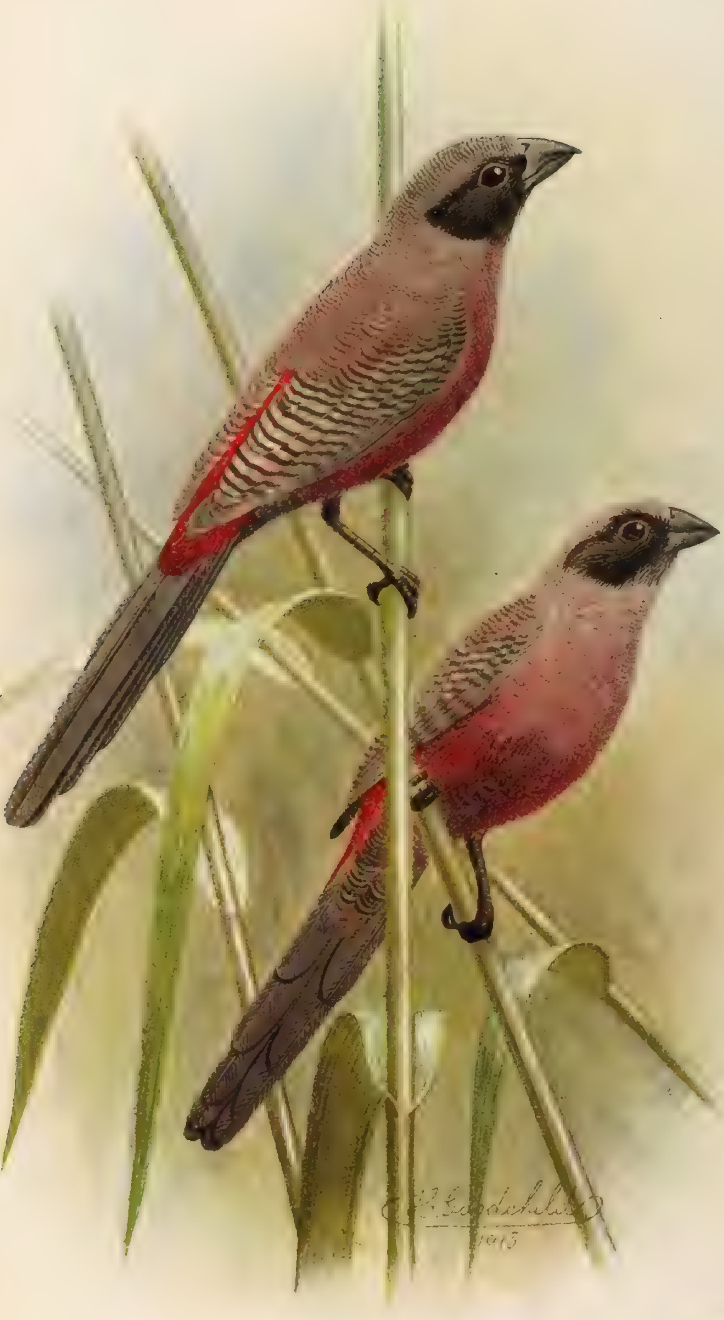
H. Goodchild
1913

[illegible]

BLACK-FACED WAXBILL.
Estrilda erythronota

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BIRD NOTES:

THE

JOURNAL OF THE FOREIGN BIRD CLUB

The Black-faced Waxbill.

(*Estrilda erythronota*).

By Wesley T. Page, F.Z.S., etc.

Perhaps I had better commence by enumerating the various species and races given under the designation, Black-faced Waxbill, in Shelley's Birds of Africa, together with the range and differentiating plumages, from the above work :

"The Grey Black-faced Waxbill (*Estrilda nigricollis*), ranges from the Gold Coast into the White Nile district."

"*Adults.* General plumage leaden grey, rather darker above than beneath , rump, upper tail-coverts, and outer webs of tail-feathers crimson, remainder of tail black ; wings dark brown strongly washed with grey , narrow margin to the front of the forehead, sides of head, chin and upper throat jet black ; sides of breast with some white spots, generally in pairs on the feathers to which they belong. . . . . . . eyelids and bill pale greyish blue. Total length 4.4 inches, tail 1.8."

Mostly known to English aviculturists as the Black-cheeked Waxbill —very rare on English markets.

"The Vinous Black-faced Waxbill (*Estrilda vinacea*) inhabits Senegambia."

Dr. Hopkinson has described this species in *Bird Notes* on several occasions, and it was figured in colour in Vol. III. (original series), page 117; thus description need not be given here. It is known to English aviculturists as the Vinaceous Firefinch (*Lagonosticta vinacea*)—somewhat irregular in its appearance on the English market and is never common.

"Delamere's Black-faced Waxbill (*Estrilda delameri*) inhabits Ugogo and the Victoria Nyanza district."

"*Adults.* Similar to *E. erythronota*, with the same amount of black on the throat, breast, thighs, and under tail coverts ; but differs in being slightly paler, a more distinct pale marginal band behind the ear coverts, and the bars on the wings more sharply defined, clear black and white. In the two latter characters it most clearly resembles

E. charmosyna . . . . . bill and legs black. Total length 4.7 inches, tail 2.3."

Not known to English Aviculture.

"The Somali Black-faced Waxbill (*Estrilda charmosyna*) inhabits Somaliland, Southern Abyssinia, and Shoa."

"*Adult*. Similar to *E. erythronota* in style of plumage, but differing in the crown, mantle, neck, throat, and underparts being paler and more pink; black of underparts restricted to a few feathers on the chin; centre of breast, abdomen, thighs, and under tail-coverts, pinkish buff; a rather strongly marked white marginal band behind the ear-coverts.. . . . . . bill and legs black. Total length, 5 inches, tail 2.5."

Not known to English Aviculture.

This brings us to the subject of our plate, viz., Vieillot's Black-faced Waxbill, according to Shelley, but, as it is already known here as the Black-faced Waxbill, it will be best to continue this species (*E. erythronota*) as simply Black-faced Waxbill, leaving the other species referred to above, to be given the prefix of the respective species when they come to hand. I should state that the descriptions quoted above are only partial and not given in full.

THE BLACK-FACED WAXBILL (*Estrilda erythronota*): This fine species which forms the subject of our frontispiece, is, I think, most will agree, one of the most successful Mr. Goodchild has drawn for us; if it has a fault, it is that the colours lack the intensity of the hues of the living bird, but that is the fault of reproduction. Till fairly recently it has been quite rare on the English market, but during last year quite a fair number came to hand, and at the present time its presence graces quite a number of English aviaries.

According to Shelley, it ranges over South Africa generally to the north of 28° S. Lat. It is apparently most abundant in German South-west Africa. Anderson in "Birds of Damara Land" states that it is generally distributed over Damara and Great Namaqua Land, and occurs in large flocks, and is also found at Lake Ngami—he states that it agrees with its congeners in habits and manners. Of the St. Helena Waxbill, he writes:—

"It lives in flocks, and is generally found upon the ground, where "it seeks its food, which consists of seeds, insects, &c."

Of the Black-faced, Stark writes:—

"In the Transvaal during winter these pretty little birds feed "on the ground in small flocks, generally near bushes, to which they "fly if disturbed. Their food consists almost entirely of grass-seeds. "They have a low, gentle, twittering note, frequently repeated, when "they are searching for food and also as they take flight. Towards "spring the flocks break up and they remain in pairs till the following "autumn."

Description. Adult Male: Above, ashy-grey, suffused with crimson-maroon; greyer on the top of the head; lower back and upper tail coverts crimson-maroon; tail black; the whole plumage lined with transverse bars, very finely on the underparts, finely on mantle and back, very distinctly on the top of the crown and nape, and fairly broadly so on the wings; eyebrow, sides of face and upper throat deep black; below, lower throat grey, strongly suffused with crimson; front and sides of breast deep crimson-maroon; centre of breast, abdomen and under tail-coverts blackish; bill dark slaty-grey, legs black. Total length $4\frac{1}{2}$ inches, tail $2\frac{3}{8}$.

Female.—She is a wee bit smaller than the male and the lines of her plumage a little less intense; the barrings of her plumage are neither so sharp nor so distinct as those of the male, especially on the wing; her head and beak are smaller and narrower than those of her mate. None of the differences are striking, yet quite sufficient for the observant eye to pick them out.

In the Aviary. I am not personally acquainted with the species under the conditions of cage-life, but, that it does well under such, is evidenced by the excellent condition in which they are placed on the show-bench from time to time; and I have seen most excellent specimens in friends' bird-rooms under this aspect. Before proceeding further, I am including here some notes, which in response to my request, my friend, Dr. Lovell-Keays, has kindly sent me of his impressions of this species, giving his experience of it in cage and bird-room flight, as under:—

Female: She is a wee bit smaller than the male and the lines of her plumage a little less intense; the barrings of her plumage are neither so sharp nor so distinct as those of the male, especially on the wing, her head and beak are smaller and narrower than those of her mate. None of the differences are striking, yet quite sufficient for the observant eye to pick them out.

"You ask about my experience with Black-faced Waxbills. I have had a few through my hands one time and another, and have found them rather delicate on the whole. They seldom come to hand really fit and well, and appear prone to become fluffy and shuffle-off.

"But they are charming little birds, full of life and vivacity—

absolutely friendly to all and sundry, whether it be birds small or great, or to mankind. I have found them easier to tame than any other birds, at any rate among the hard-bills. Quarrelsomeness and pugnacity are certainly not their besetting sins. They quickly learn to come to hand for mealworms and seem to know no fear. They appear to be more or less gregarious, and at night-time 'cuddle-up,' not only with each other but other Waxbills.

"Their call note is a prolonged 'peep (pause) peep,' somewhat reminiscent of the call of the Long-tailed Tit.

"They are very partial to Insectile Mixture, more so than most hard-bills, but do not partake of sop or fruit. I have never seen one bathe yet, nor have I ever seen one which has bathed.

"Their distinguishing characteristics are their alertness, quickness of movement and friendliness. I wish I had fifty of them, as I feel sure they would agree absolutely both among themselves and with other birds.

"I am sorry to say I have one that is apparently quite blind. In his cage, or rather her cage, for it is a hen bird, are a Quail Finch nearly done to death by a Jacarini Finch (♂), a sick Gouldian Finch (♀), and at times others have joined the company in the sanatorium. The little blind Black-face is wonderful at finding its way from perch to perch, and at finding seed and water. It also is wonderful at finding the Gouldian, and alas! its affliction seems to have soured its disposition, for it never allows the Gouldian to come near it, but chums up with the Quail Finch (a cock by the way) for warmth and sympathy. As the Quail Finch has only six feathers left, the Waxbill is of course under a misapprehension and would do better to chum up with the immaculately clad Gouldian. But there! Love is blind and to her the out at elbows, shoe-less Quail Finch fulfills all her needs for comfort and support.

"My Black-faces prefer roosting on a small twiggy branch to retiring into a basket or box. At present I have only kept this species in cage or birdroom flight. I am simply aching for the time to let them into the outer flight, and for the past month or two have quite envied Rip van Winkle.

"In conclusion I will only add that as long as I have an aviary, and the price of a pair of these charming and loveable birds in my pocket, they shall have a place in the aviary, provided always they are to be obtained. But may I add one word of warning, passed on to me by our popular Editor—Beware of having spoilt children in the aviary. Remember the old, old adage (somewhat modified I own), viz: Those whom the Gods wish to destroy they first make greedy. Aye, Aye I answer, and away o'er the distant hills comes the same echo 'Aye Aye' from 'pets' we have helped across the unknown river, leaving behind them a heavy heart and I fear a guilty conscience, anent the crime of indulgence." L. LOVELL-KEAYS.

Personally, I am more acquainted with it in the roomy flight of a garden-aviary, where they are fascinating indeed, and their graceful contour, exquisite and chaste colouration and harmony of plumage are seen to the best advantage, set off by a background of living green. Last summer during a call on my friend and colleague, Dr. J. Easton Scott, I saw in his roomy, natural garden aviary a pair, which held us entranced by their perky, cheery demeanour as they flitted to and fro, causing us to exclaim again and again, as some play of light revealed some fresh charm of their lovely garment.

I was introduced to yet another pleasing trait, barely a month ago, during a visit to my friend Dr. Lovell-Keays, it was with surprise that I saw a pair of this species and also Violet-eared Waxbills fly to the hand at once, the desideratum being a mealworm: for this dainty they were just as ready to come to the hand of a stranger as to that of their owner they occupied with some other 50 to 60 Finches and Waxbills a flight in his heated bird-room.

So far they have not nested in English aviaries, though there is no reason why they should not do so in the near future, as they do well in the open from Spring to late Autumn, but should be brought indoors during the Winter months.

On arrival they should be put into reception cages, say, about the size of a canary breeding cage, and placed in a fairly warm room, supplied with food and water, but as regards the latter; as soon as they have had a drink, water should be removed for a time and introduced only at intervals for a couple of days, when it should be safe to leave it in altogether; by similar means do not permit them to overbathe and also give them grit with caution at first. They should be given a liberal supply of seed, a millet spray, greenfood, and two or three mealworms per bird per diem; they should be left quiet and only disturbed to administer to their wants. If all goes well in a few days the cage can be hung up in the inner house of the aviary they are to occupy, then in another few days (providing weather is suitable) the cage door can be left open for them to come out at will.

There are no more beautiful group of birds than the Waxbills and "Small Ornamental Finches," or more interesting and charming too for that matter—and the rarer species more especially so—though the writer's aviaries have been largely given up to soft-bills of late years.

In conclusion, I would add that these notes have purposely been left of a cursory character, as the writer hopes at no distant date, some other pen will tell the alluring story, in full detail, of their domestic life and a family successfully reared under alien skies. Also some member, perhaps, will describe them as inmates of the bird-room.

◆

My Aviary (Yorks.) and Birds.

By Mrs. R. E. Wethey.

At our Editor's request I am sending in two photos of my little aviary, which is a very unpretentious affair compared with most of those which appear in our Journal.

The sleeping house was built as a summer house and is fitted up with old tree trunks and branches; nesting boxes and husks are hung from the roof, etc. At one time I lined the walls with banks of heather and hay, which made it very cosy, but, it also made such a splendid and much appreciated nesting place for mice that I had to clear it all out.

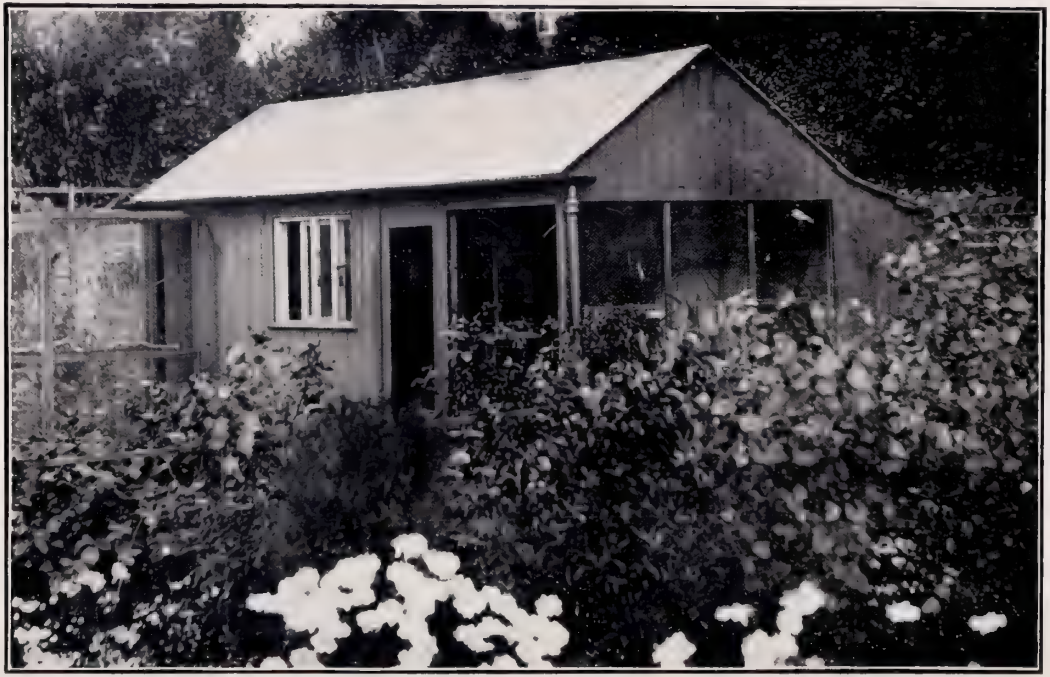
On to the side of this house we had a covered flight made, the front of which is fancy wire-work, and the whole side is half-inch mesh wire netting, with windows, (three separate sashes) which can be taken down in hot weather; there is a similar window which is put up at night and in bad weather over the front wire-work of this flight. The floor is cement. Slates were put down, all round, before the cementing was done, so as to keep out rats and mice, but the field or garden mice walk in through the wire-netting of the outer flight. In the covered flight are some tree trunks and branches as roosting accommodation.

As will be seen by the photo ("as now") an open flight of half-inch mesh wire-netting and wood-framing runs along the length of the house.

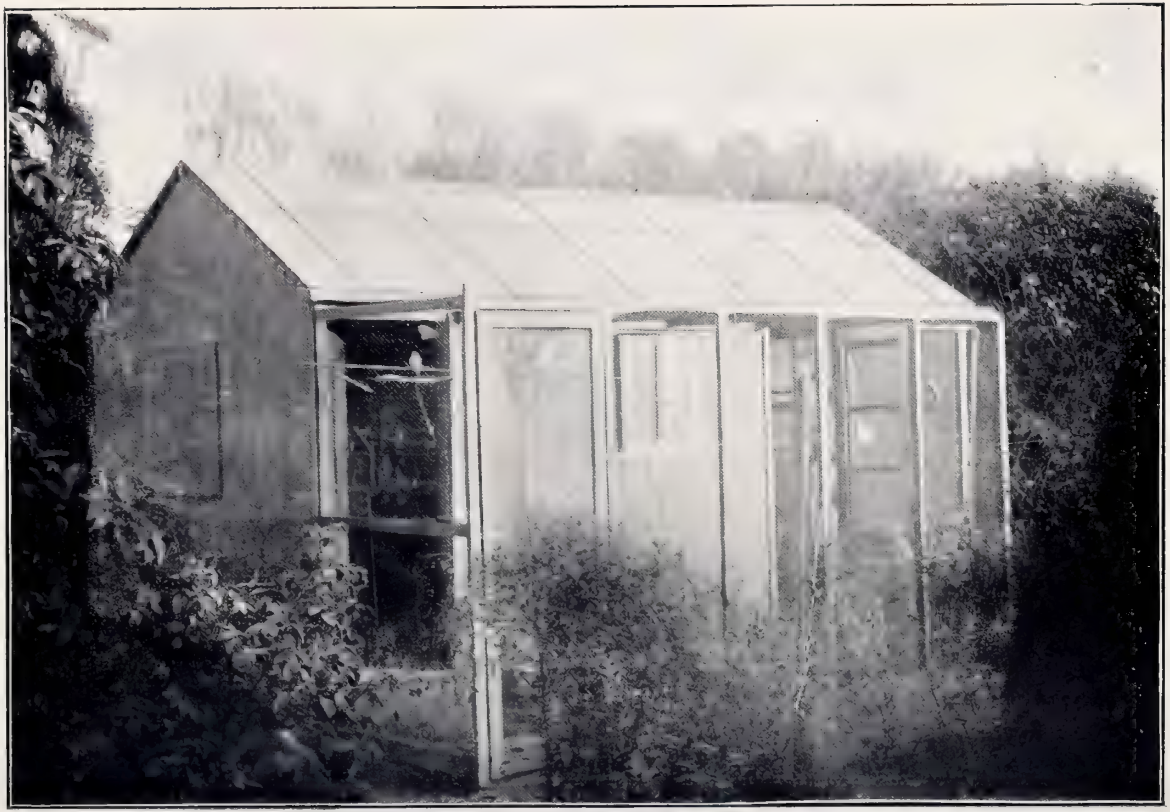
The inmates of the aviary are:

Cockatecls, Budgerigars, Java Sparrows, Pekin Robin, Zebra Finches, Silverbills, Cutthroats, Black-headed Mannikins, pair Indian Red-eared Bulbuls, and Red-faced Lovebird.

I had a pair of the Red-faced Lovebirds (*Agapornis pullaria*) but, sad to say, the hen died in a fit some four



Mrs. Wethey's Aviary—as at first.



Mrs. Wethey's Aviary—as now.

months ago, when they were both looking in most perfect condition. My Lavender-headed Lovebirds (*A. cana*) died; also some Green Singing-finches (*Serinus icterus*), brought home from India about two years ago.

These birds remain out all the year round, and the aviary is not heated in any way.

Cockateels, Budgerigars, Cutthroats, and Silverbills have all reared young. The Java Sparrows nested, but the hen died in the nest during incubation (I noticed by the records in "Bird Notes" this often happens with this species). My Lavender-headed Lovebirds went the same way. The Zebra Finches (*Taeniopygia castanotis*) have nested twice; the first year they threw the young out of the nest when a few days old and last year eggs were laid but not incubated.

In a smaller aviary I have Yellow Budgerigars (these breed freely), and a pair of Red-crested Cardinals (*Paroaria cucullata*). The Cardinals built a beautiful nest in the larger aviary, but, became so savage with the smaller birds that I had to move them into the small Budgerigar Aviary. I regret to say they have not built again—am hoping they will do so this year. In a sheltered nook of the garden I have a cage built, like the one described in our Editor's book, "Aviaries and Aviary Life," and, belonging to Miss Thorburn, of Liverpool. This is used as the nursery for young Budgerigars, etc., and a very useful cage it is. My aviary has been in existence for three years and a most delightful hobby it is, affording never ending—in fact, ever-increasing--interests. I look forward, with great pleasure, each month to the arrival of our most interesting journal "Bird Notes," and wish it prosperity.

◆

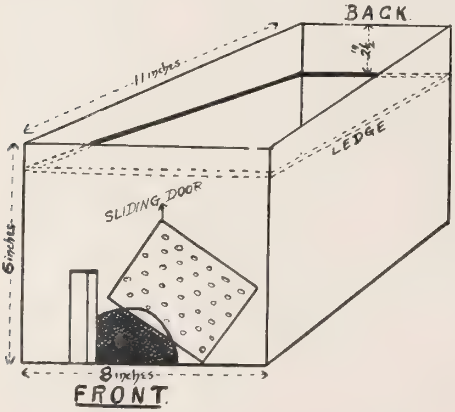
An Effective Mouse-trap.

By Dr. L. Lovell-Keays.

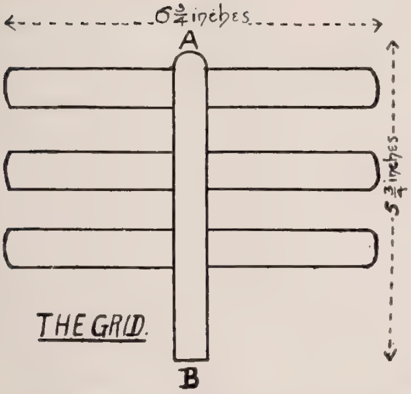
A Mouse-trap that will catch mice is what we have all been looking for, but failed to find. Fortune smiled upon me once again, when I ran up against this *desideratum* of aviculturists in the home of a Canary-fancier.

The apparatus is so simple that anybody could make it in a short evening, and is as effective as it is simple. It never fails to catch mice, no matter how long it has been in use, or what amount of provender is scattered on the floor in the vicinity of the trap.

As to the making of the trap, mine is made out of a Hudson's Soap-box roughly 6 × 8 × 11 ins. About one-third has been cut off to make it a convenient size, and one end fitted with a small sliding-door, made of rather coarse perforated zinc. This is to let the mouse out, when caught, into a salubrious pail of cold water. On the inner sides of the box are fastened pieces of $\frac{3}{8}$ in. square strips of wood, forming a ledge. This must start from near the top of the front end to a point about $2\frac{1}{2}$ ins. below and parallel to the top of the box at the back. The object of this is to allow the lid to fall easily, and I am told is an essential part of the trap. The ledge fits round the four sides of the inner walls of the box. A frame is next made to fit loosely, yet fairly accurately, inside the box, and of course, rests on the sloping ledge; this frame must be covered with coarse perforated zinc. Any hook or rough sort of hinge serves to keep the lid in place, and yet allows free movement at the back part. In mine the maker has merely pushed a piece of iron wire through the end of the box and just bent it over the frame of the lid. It looks most amateurish and insecure, but is efficacious. No matter how the hinging mechanism is made, it must be so arranged that the lid falls easily and accurately on to the wooden ledge of its own weight.



Right in the middle of the floor of the box is a wooden post with a knife-edge running sideways—about ½in. in section and 3ins. in height.

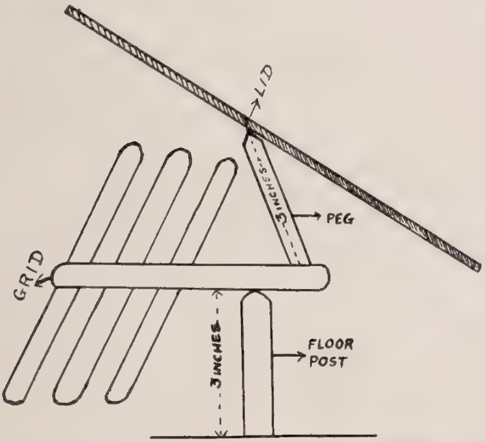


Next we must make a kind of a grid, a little narrower from side to side than the interior of the box. It is shaped thus (*vide* fig.)—it is extremely roughly made and must be light and constructed of wood.

Finally we need a peg about 3ins. long, with a point at one end and a knife-edge the other.

If we fasten the front door of our trap; throw any odd seed, dog biscuit or cheese inside the box, we can then set the trap.

The "Grid" is introduced into the box, the lid being raised so that the part A.B. is uppermost (this is important) and the end B. resting on the floor post about half to three-quarters of an inch from the end of B. The peg mentioned above is then placed on the extreme end of B.; the lid is gently allowed to drop on to the pointed end of the peg and the trap is set.



I have sketched very diagrammatically the essentials of the trap. It will be noticed that we have here the lid balanced by the grid in a state of unstable equilibrium. The mouse jumps on to the grid, upsets the balance, down drops the peg and the lid falls on to the ledge.

It is so simple and certain that it never fails; but, certain points must be observed. One is, the box must be large and thus in no way suggest a trap. Mice cannot keep out of a box; they climb up quite readily and though seed may be broadcast outside they will get into that box. Then the perforated zinc must be fairly coarse or again the box will suggest a trap. Finally no matter how roughly made, all the parts must work freely. It sounds absurd and yet in reality the very roughest work is all that is needed. My Canary friend said that one night he caught six at one time, as he had set the trap a little too heavily. I first practised by dropping a pencil-case on to the grid, which, of course, must fit pretty accurately or a mouse may get between it and the sides or front end of the box and so not upset the balance.

This trap is a grand success, and if it does not succeed with you just drop the writer a line with a diagram and no doubt your mistake can be pointed out. If there is a mouse and the trap is near, that mouse is absolutely booked, but usually it will only catch one at a time.

I have found no tendency for birds to get into the trap, but even if they did, no harm would come of it, as the lid only falls a short distance and would give the bird no chance of escaping. After giving the trap a good trial, I have come to the conclusion the trap is just "IT."

◆

Breeding of Hybrid Bengalee x Bib Finch.

(*Uroloncha domestica* × *Spermestes nana*).

By Lord Poltimore.

A cock Bengalee and hen Bib Finch paired in June, 1913, and went to nest the first week in July.

The nest was made of grass, feathers, and cow hair, in a box 5in. × 5in.

When first examined, it contained four eggs, on the 10th of July there were five eggs, and on the 24th egg shells were found outside the box.

Incubation lasted 13 or 14 days.

On the 14th of August, the young were seen flying about the aviary, their colour being a tawny brown, a little buff showing on one of them, also a larger patch of white under the throat than the others have.

The remaining three young have a little white showing in the black patch under the throat, also three or four white feathers in the flights above the brown. The birds also vary a little in size, some being larger than others.

The food consisted of Canary, Millet (red and white), spray millet, cuttlebone, and soft food.

The aviary contains the following birds:

FINCHES: Parrot, Olive, Striated, Spice, Black-headed, Rufous-backed, and Bib; Mannikins and Bengalee.

WAXBILLS:—Lavender Finch, Common Avadavats, Green Avadavats, Gold-breasted, Orange-cheeked, St. Helena, Cordon Bleu, and Red-billed Weavers.

◆

The Rufous-bellied Niltava.

(*Niltava sundara*).

BY R. S. DE Q. QUINCEY.

In response to your request in February "Bird Notes" I am writing to tell you a little about the pair of Rufous-bellied Niltavas, which I obtained from Major Perreau in March, 1913—so far, they have made obsolutely no attempt to nest.

It is most interesting to watch them catching flies and gnats, especially in the evening. You see them sitting sleepily on a branch, then, suddenly they make a dart, catch their fly or flies, and return to their original branch. You can tell the number of insects they have caught by the clicking of their bills.

They must have splendid eyesight, for often in the dusk you will see them literally "dart" fifteen to twenty feet, ending up with a click and a swoop on to the nearest branch.

They seldom go on the ground, but often sit in the shade of a Rhododendron bush, of which our aviaries are full, about a foot from the ground. There the cock would sing, when the sun was shining, a pretty but rather soft little song. At such times the hen would come quite close to him and they would sit together, but otherwise they were very seldom found very near each other. They each seemed to have their own part of the aviary for catch-flies, and seldom trespassed.

If suddenly frightened or excited, the cock utters a harsh, loud, grating cry, which is almost a cackle; the hen never did this.

They love bathing, and in summer time the cock often had as many as six dips a day.

They are exquisite birds and the blue on the cock's head shines beautifully in the sun. I also noticed that he used to raise these feathers when excited, much after the style of a Mesia. The hen opens her tail like a fan and jerks it up and down much more than the cock; in fact this movement seems to correspond with the cock raising his crest and cackling when excited.

I think they are very hardy, especially for Flycatchers, though they do not like damp and fog: but, what bird does?

To my great disappointment I lost the cock in December, but was fortunate enough to secure another from a member. Though the new one is in quite good condition and plumage, and was exhibited at the recent L.C.B.A. Show, yet he is not nearly so bold a bird as the one already described, and lets the hen drive him round the cage (6 x 2 x 2ft.), which they have both occupied since December 28th. Previous to this the hen was out in an aviary, and although she seemed perfectly well and in excellent condition, I did not care to leave her out after losing the cock.

The old cock died very suddenly, seeming perfectly well just before, and it was a discouraging loss, but I think that the new one may do better, for the old one used to bully the hen at times.

It is very noticeable how much tamer cocks become than hens, or at any rate than my hen. The cocks have always come on my hand for a mealworm, while I have never succeeded in getting the hen nearer than my feet.

They adore mealworms, and would do almost anything to get one, but besides these I supply live ants' eggs, insectile mixture, fruit (chiefly orange), bread and milk (containing barley water), and boiled water. As our tap water is so chalky it is always boiled before being supplied to the birds.

◆

The Secret of Keeping Gouldian Finches. What is it?

By Dr. L. Lovell-Keaye).

The question is indeed easy to ask and oddly enough easy to answer. Shortly: all you need is healthy birds, good food of a suitable kind, and plenty of space. "Climate"? you ask—"It doesn't matter," you reply, and yet the lie sticks in your throat, at its very birth. Why, oh, why is it we can keep Long-tailed Grassfinches, Ruficaudas, Diamond Finches and Masked Grassfinches, to name a few of the commoner Grassfinches, and even the evasive Pintail Parrot Finch has no terrors for us (to say nothing of Firefinches and Lavender Finches) but Gouldians seem to be heartbreaking, there is something uncanny about them. I have kept Gouldians and still have some, but I cannot claim to have succeeded with them. My friend, Mr. Sich, whose aviaries adjoin mine, has tried for a number of years and apparently his successes have been sadly tinged with failure. In him and myself you have the exactly opposite type of aviculturist. I am rather of the happy-go-lucky-find-out-for-yourself type, and he is the careful rule-of-thumb type. But when it comes to Gouldians, our results are much the same with this one great difference, and that is, he has bred them and I have only nearly done so. It was on talking over the subject with that most interesting and versatile of all aviculturists (I mean our genial Editor), that he asked me to give my own experiences and to formulate a plan to investigate the cause of our losses. Personally I don't mind admitting non-success a little bit. If by admitting and publishing it, I can learn how to avoid failure in future, I am far better off than he who won't admit it and so cannot learn better. I will then describe my experiences and endeavour to show my faults as well as my virtues. I started with Gouldians in May, 1913 The weather was warm and fine. My aviary faced south; there was a very excellent and lofty inner house, absolutely free from draught. In it was a tub containing a living fir tree. On this the Gouldians would sometimes roost. The light too, was excellent. My outer flight was then only 20 feet long by 10 feet broad, and 8 feet high. It was boarded up at the east and west ends, and only open above and to the south. Abundance of natural green food was supplied and seed of the best, besides cuttlefish, mortar rubbish, water, rock salt and so forth. But the soil or rather subsoil is clay, and here I believe is one cause for the loss of my Gouldians. I had 2 pairs of Blacks and one pair of Reds; of these one pair of Blacks was acclimatised and had bred young previously. The other two pairs were, I believe, acclimatised and came from an exhibitor. I was new to the game in those days and treated my birds differently to what I should now. I recollect that the cock Red was the pick of the lot, and then a pair of Blacks were also excellent, but the Red hen and the other pair of Blacks were not quite up to the mark. I turned them straight into the aviary; but, I know now that only the hardiest birds can stand that sort of treatment whatever the time of the year you turn them out. I am convinced that the best thing to do is to cage your birds in the inner house for three, four, or more days, according to the time of the year and then leave the door open. Birds are strange creatures—intensely nervous for the most part, and the newness of their surroundings is quite enough to put them clean off their food. The nervous depression consequent on the journey and the privation of food all conduce to a condition of a kind of paralytic fright. To illustrate my point: I had a pair of St. Helena Waxbills, which were both confiding and fearless. One day the cock bird got his foot entangled in some grass. It could not have been there long because only just previously I had given him a mealworm. I rescued him as quickly as possible, but even so, he lay in my hand utterly exhausted. I put him in a large cage with food and water in a nice warm corner of the inner flight and left him. In twenty minutes the little bird had recovered and flown out, as I had purposely left the cage door open. But, and here the sad part of the story comes in, the next morning he was dead, although before the accident there was not a fitter bird in the aviary and it was August. I think that was the most instructive death I ever had. Fright or its first cousin, over and sudden joy are the cause of more deaths than we wot of; I fear we are apt to forget our feathered little chums have nerves and if we could but see and feel their little hearts tick-tacking two-hundred times or more a minute we should hesitate to catch them up quite so readily, and think twice before we pushed a great finger into their tiny nests or permitted ladies clad in fearful and wonderful graments to enter their very sanctum. Of course, birds kept in cages and used to being handled are very different, and do not seem to mind very much what happens to them. But to return to our argument, I have come to the conclusion that possibly soil is a factor; next the change of surroundings and the fright absolutely inseparable from a change of locality, certainly are very potent factors in the loss of birds, particularly Gouldian Finches. But, in the case of my Gouldians they seem to get over all these enormous disadvantages and in a month's time one pair of Black-heads went to nest, and actually hatched out. I could hear the young yelling for food as if their lives depended upon it, as in fact they did. But one day the chorus was less noisy, the next day or so it became fainter still, until finally the chorus ceased. The parent birds got the hump and ceased to minister to the wants of their family. I have not the smallest idea why. Certainly it was not due to interference, either from man, birds, or mice. But after that my parent birds seemed to mope; they made a second attempt at nesting in August when the hen bird died—I do not know of what. From the end of August onwards the Gouldians got more and more tired of life, they lost tone, and drooped their wings (what a pregnant sign it is when the primaries get well below the level of the tail-feathers!) and then shuffled off " one after another, until I only had a Red-headed cock left. He was transferred to a warmed bird-room in November, but he found life a burden about Xmas and applied for his passport soon after. My friend, Mr. Sich, had a very similar experience. He had two breeding pairs in an exceptionally roomy aviary, they had a brood of 4 and later two of 7 (*i.e.* 4 and 3) simultaneously. The first four have all lived. The latter have all died and the parent birds as well, with the exception of one cock. The seven young birds were caught up and put into an inner flight, but pegged out about a month, six weeks, or two months afterwards, one by one. But the four older ones, which were in a cage in the same bird-room all survived, and are still alive to this day. Since going to Press the four young birds have been turned loose into an inner flight (warmed) and one bird has died.

One can only suggest lack of stamina of the second birds, but the significant fact remains, that the four survivors were caged and the seven that died were flying free in a bird-room. That brings us to the next point of consideration and that is—Do Gouldians do better in cages than in an aviary? I do not ask, "are they happier in an aviary"? Of course they are, although I don't think Gouldians could ever be really happy. They are at best solemn little beasties. Personally I am inclined to think they do better in cages if well kept than in an aviary, but of course you cannot breed them in a cage. It is my belief (I don't wish to dogmatise or to force my belief's on anybody) that these birds cannot stand *damp retaining soils*—nor can they stand the driving biting winds inseparable from an out-door aviary. Gouldians are extraordinarily idiotic and seem to choose the most exposed bush to roost in they can possibly find. This seems to be their invariable custom. It is a well-known fact that Gouldians are very subject to pneumonia. I ask a simple question: Do you think a bird is more likely to get pneumonia in a well made cage or in an exposed out-door aviary? Even a cage in a warmed bird-room is less liable to draughts or sudden changes of temperature, than the bird-room itself. Mr. Gray has also pointed out that brightly coloured birds are more prone to pneumonia than sombre plumaged ones. May not this be due to the fact that *ceteris paribus*, a beautiful bird, is more valuable than an ugly one. If more valuable, more often kept, and if both die it is more likely the brighter bird finds its way to the pathologists than the less valuable dull coloured bird. This is a mere suggestion, but it is good for us to think things out for ourselves and to come to conclusions with the aid of specialists but not by any means to ignore their experience and dicta. My object in writing at such length is first of all to get our readers (and that means you personally) to help the great science of aviculture to make advances. It is due to you, to your hobby and to our energetic and resourceful editor that "Bird Notes" be not only a medium of publishing nesting results and giving plans of aviaries—both of which are to my mind extremely interesting and, I know, popular, but also a medium for doing real research and scientific work which will live and be handed down to posterity. Here is indeed an opportunity to investigate the causes of and to find out the remedy for the losses, of say, Gouldians. Anybody who has ever bought, I don't mean kept, but bought a Gouldian can help. Perhaps you may unconsciously have the key that opens up this mystery chamber. Something you have noticed; something you have done either right or wrong may be the link we are searching for. What we want you to do is first of all to take the thing seriously and as a personal matter. Write and tell us exactly your experience from the day you bought your bird to the day you either sold, exchanged, buried or still better to the day you still have it. Express any opinion you choose, even if others might think it sounds too ridiculous for words. Your opinion may be right—the experts may be all wrong. I remember once reading in a waiting room a book written by Mrs. Humphrey Ward to young girls on their Deportment in the Ballroom. It was "Talk my dear girls if it is only about the great big green gooseberry." *My* request to you who have ever had a Gouldian is "Write, dear reader, if it is only about the way the wretched thing moped." The scheme depends upon you for success. The facts when collected will be carefully sifted and the results will be given in "Bird Notes." But remember we cannot succeed without your help; we may succeed with it. In any event your experience however limited, however unfortunate, is bound to be interesting; sure to be useful. We cannot do without it. The more minute the details, the more interesting and more useful your letter will be. But if you have no time to write a long letter, just drop us a postcard with any facts you think may interest us. You may be sure they will; At any rate let us be the judges. All communications may be sent either direct to myself at East Hoathley, or through the Editor, who has kindly undertaken to forward all matter to me, and will of course be treated as confidential.

A Hawking Episode.

By H. Whistler, I.P., M.B.O.U.

The Heroine of the Story.

It is a dull overcast morning as we ride out of the old Serai courtyard and turn our horses' heads towards the low stretch of hills which form the advance guard, as it were, of the Salt Range. The horses are impatient in the cold and the Shikaris on foot have already preceeded us, so it does not take long to reach the meeting place, a village near the base of the hills.

Here we find the object around which the expedition centres—a young Peregrine Falcon: She was caught on October 13th, near Hazro, in Attock District—a bird of the year on her first migration—and since then has been an object of the most loving care on the part of my Falconer and myself. As far as points go the Hawk is a very good one and we have determined that her first flight shall be at Honbara Bustard; this is the reason why she is still unentered, for I have so far been unable to visit any Bustard ground. However, some days ago, Shikari came in with the news that he had seen three Honbara in a patch of cultivation at the foot of the hills; so as the spot was near a Serai bungalow some ten miles from Headquarters, the chance was decided to be worth trying.

At first, appearances are against us; the ground is very bad, broken up into rocky nullahs, and very different to the sandy wastes which one usually associates with Bustard. Moreover, none of the villagers seem to know what a Bustard is, the most ingenious suggesting that it is " Hare " we really mean, and the local Shikari who gave the news is not to be found. At last a man is discovered who knows what I have come for and the spot where the birds were seen, and guided by him we reach the right place; this consists of a number of fields of wheat growing in somewhat sandy soil; on every side are stony ravines most unsuitable for riding, but trusting to luck we form a rough line and start to search for the Honbara. The Hawk's jesses are loosed from the leash and she is held in readiness to be unhooded and slipped at a moment's notice.

For a good hour we quarter the ground without a sign or trace of a Bustard; at last one hopeful reports tracks, but on investigation, it appears that he is unable to distinguish the difference in size between Partridges and our quarry; and that gleam of hope is quenched. At last we are on the point of giving up and the line has become very straggly, when up springs a Honbara and flaps away in a grotesque Owl-like fashion. It is marked down, and the Falconer, who did not see it, is shown the spot.

Collecting, we advance together, and the Bustard rises somewhat ahead of where it had settled; it is just out of gunshot, but the Peregrine is slipped and at once launches in pursuit. The Honbara realises his danger—it is a very fine old cock bird—and plunges down into a convenient nullah before the Falcon can come to terms, so the latter takes up a commanding position on a rock above and waits for the Shikari to climb down into the ravine and dislodge her prey.

The Honbara rises; like a flash the Peregrine stoops and both birds are rolling in a confused mass on the ground; but the Falcon is caught by a thorny bush and the Honbara breaks away—a respite which gives him time to get well into his flight before the Falcon can extricate herself. Now the fun begins, and I gallop like mad to join in the flight. As I cut off a corner and catch up the Bustard, the Falcon comes up, but the latter is young and her ignorance gives a respite to the pursued, for as hunter and hunted pass over my head I see the former trying to bind to her quarry from behind—a manœuvre which gives the Bustard time to get ahead again. This was the beginning of a desperate race, both birds straining every nerve, and I should have been outpaced at once, had not the pursuit kept circling back to me. The last time they passed over head the Bustard was nearly done—its mouth wide open, its flight more laboured.

Some rough ground delayed my headlong career and the birds disappeared from ken behind some trees—I passed through and I could see no trace of Bustard or Falcon. Close ahead was a large and deep ravine, and near it a man herding camels, who told me he had seen both birds dash headlong into the ravine and that was all. Then ensued a weary search. I searched every nullah and ravine near hoping to find the Peregrine pluming the dead Honbara, but there was not a sign of life, or death! and when the search proved fruitless I took out my lure and called from every high coin of vantage. But all that was brought to the lure was the Shikaris, who had been outpaced entirely in the flight: they come up and made confusion worse confounded by declaring they had seen both birds stoop into a different group of ravines. So we searched there also; but climbing and descending, calling and swinging the lure produced nothing save a derisive croak from a passing Raven.

At last, weary in body and soul, mindful of a long ride home before me, I sorrowfully mounted and turned my horse's head homewards, regretting the loss of a good and promising Falcon. For such a flight on the first occasion that it had been slipped at wild quarry had fully proved the value of my Peregrine. Even so all would have been well and my Hawk recovered had it not been for the native character. This is what happened—I reconstruct the story as it afterwards came to light.

The stoop into the nullah that had been seen was the final one and the Honbara had been killed: but standing to plume the body the Falcon had been frightened away, probably by an Eagle. She had then flown along to a neighbouring hamlet and killed a chicken, on which she was breaking her fast, when an aged man took her up. The sharpness of her talons quenched his ardour, and he made his find over to another man, who shut her up in his hut. The hamlet was a secluded one and the inhabitants did not know whose the bird was, not having heard of my presence; but the bells and jesses showed them that the captive was a trained Falcon, and so presumably worth money. Next day a Shikari, whom I had deputed to search reached the hamlet and soon heard of the bird. Being anxious to claim the credit and the whole of the reward which I had promised, he asked the man for the Hawk, saying it belonged to a certain Sayad. The other not unnaturally refused to give it up, as the Shikari carefully concealed the fact that he had been deputed to search and the news of my being in the neighbourhood had not reached the hamlet. Then instead of saying "It is the Police Captain Sahib's property and he told me to look for it," the Shikari hastened to headquarters, to tell me how the captor had refused to give up my property, although warned who the owner was. My Falconer went off at once with a constable to find that the bird had been lost again, for the captor had tried to fly it at a Partridge and being totally ignorant of the art, had made a mess of things.

Needless to say, that Shikari has heard my full and true opinion of him, and he is now searching with an energy that could scarce be bettered, so there are still hopes of recovering the stray. But still, even if the above is the only flight my Peregrine is fated to give me, two months of training have been well repaid by the excitement of that headlong ride.

◆

Breeding the Plumed Ground Dove.

(*Lophophaps plumifera*).

By Lord Poltimore.

This pair of charming Doves have been in one of my aviaries for the last three years, and only last July succeeded in rearing their first family, though they have had many an attempt.

The first year I had them (1911) they laid two light creamy white eggs, but both were clear.

In 1912 they laid in all 10 eggs, but each time they were disturbed by other birds in the aviary.

The nest is placed on the ground, on more than one occasion just inside the door leading into the aviary, merely a slight depression of the ground and not protected in any way.

In 1913, they laid in May and June, but on each occasion they were interrupted while incubating, but towards the end of the month, they hatched out one young one, which was killed by the male bird when eight days old.

(Photo by H. Willford.

But in July they were more fortunate and hatched out two young ones, incubation lasting 14 or 15 days.

The young resemble their parents in general colour pattern, but are of a duller hue, in fact are rather mealy looking.

These two are now separated from their parents and we hope they will breed this summer.

The aviary contains the following birds: Black-cheeked Lovebirds, Blue-winged Lovebirds, Zebra Doves, and Virginian Cardinals.

The food consisted of canary, millet, millet sprays, and a little sunflower and hemp.

◆

Birds of the Jhelum District.

By H. Whistler, I.P., M.B.O.U.

(Continued from Page 96).

GENERAL REMARKS ON THE MONTH.

February, on the whole, has been an interesting month, as while for the most part ornithological conditions have been those of the winter, there has been a certain amount of movement foreshadowing the spring migrations.

A small proportion of winter visitors have departed: probably in some cases the entire body of a species has gone, *e.g.*, The Blossom-headed Parrakeet; whereas in others the majority of a species have departed, leaving comparatively few individuals to follow in March, as for instance in the case of Sandgrouse and Rooks. These deficiencies have been made good by the arrival of what may be considered "accidental winter visitors"—birds that have come down from the Himalayas to escape the hard winter conditions, rather than deliberately migrating. Some of these were numerous, *e.g.*, *Hypsipetes psaroides*, and probably arrive every year: others such as *Merula boulboul* and *Oreicola ferrea* would probably not be found here in a mild winter.

Then there has been the arrival of certain species such as *Pratincola caprata* and *Glareola lactea* which are here summer visitors only: also the commencement of the arrival of certain species which are immensely common in summer, and found very sparingly in winter This category includes several well-known species such as *Sarcogrammus indicus*, *Dicrurus ater*, *Coracias indica*, and *Cypselus affinis*; and such birds will not obtain their full numbers until well into March.

Besides these a proportion of species have arrived that may be considered as the advance guard of the spring passage: such as the Striated Swallows, *Emberiza leucocephala*, and certain Wagtails: and with some birds (*e.g.*, the Sparrow Hawks) it is hard to distinguish whether they have arrived on spring passage or represent a minority left behind as winter visitors after the passing of the autumn migration.

The regular winter visitors, such as *Parus atriceps*, *Pericrocotus brevirostris*, *Certhia himalayana*, *Motacilla alba*, *M. personata*, *Vanellus cristatus*, various Buntings and Chats, etc., etc., have remained constant during the month; though a few such as *Merula atrigularis* have decreased in numbers of individuals.

Feb. 1.—Visited a small jheel near the river, about 5 miles from headquarters, where there were a number of Wild Duck (*Anas boschas*) and some Ruddy Sheldrakes (*Casarca rutila*). A small flock of Geese probably consisted of the Grey-Lag (*Anser ferus*). Green Sandpiper (*Totanus ochropus*) were common about the pools, and on a neighbouring plough four Black Ibis (*Inocotis papillosus*) were feeding. In the distance I saw two large black Storks with white necks and black heads—these can only have been the White-necked Stork (*Dissura episcopus*) which is rare in the Punjab.

On the road to the jheel, a pair of Lugger Falcons (*Falco jugger*) and a pair of King Vultures (*Otogyps calvus*) were noted—the latter were probably responsible for a large half-built nest in a thorn-treee by the roadside.

A number of Swallows (*Hirunda rustica*) were flying round a wayside pond and settling on the sand near by—these were the first of the species noted here since October, when large numbers appeared on migration during the first half of the month.

Two Green Parrakeets (*Palacornis torquatus*) seen pairing on a tree. A pair of Indian Rollers (*Coracias indica*) by my house were most noisy and indulging in their courting flights. A Kestrel seen.

Feb 2.—Went into camp at Sohawa (1,426 feet). A King Vulture and several White-backed Vultures (*Pseudogyps bengalensis*) noted.

Feb 3.—Sohawa. Heavy rain prevented much observation, but I saw a fine adult Lugger Falcon and a flock of Eastern Meadow Buntings (*Emberiza cia stracheyi*).

Feb. 4.—The country round Sohawa consists of a sandy soil much broken up by shallow rocky ravines, the level ground being cultivated, and the ravines but sparsely clothed with coarse vegetation and a few low thorn bushes. The most numerous birds were flocks of Skylarks (*Alauda arvensis*) and Short-toed Larks (probably *Calandrella brachydactyla*), which frequents the cultivations; and Crested Larks (*Galerita cristata*) and Rufous-tailed Desert Larks (*Ammomanes phoenicuroides*) which prefer the rocky ground.

Over cultivation and ravine alike the numerous Chats lent a touch of animation to the scene. The White Chat (*Saxicola capistrata*) and the Red-tailed Chat (*S. chrysopyga*) were the most common, but a few Strickland's Chat (*S. opistholeuca*) and a single Pied Chat (*S. picta*) were noted. All the above species except the Crested and Desert Larks are merely winter visitors to this part.

This broken country extends to the foot of a range of low hills that form an off-shoot of the Salt Range proper. Attracted by a large white patch on the hill side I went to investigate and found the patch to be a small rough precipice whitened by the droppings of generation upon generation of Griffon Vultures (*Gyps fulvus*) which have used it as a resting place when weary of wheeling high above the hills. A native officer who lives in a neighbouring village told me that he remembered the white patch as present in his boyhood, when however, it was smaller. While I was watching the Griffons, two Lammergaiers (*Gypætus barbatus*) passed by, scanning the hillsides for the wherewithal for a meal.

Several *Emberiza c. stracheyi*, 3 Swallows, (*Hirundo rustica*), some Crag Martins (*Ptyanoprogne rupestris*), three Blue Rock Pigeons, (*Columba intermedia*), an adult male Sparrow Hawk, and a few Indian White-throats (*Sylvia affinis*) were also noted near the base of the hills.

In the evening visited some ponds where a Heron

(*Ardea cinerea*), a Great White Egret (*Herodias alba*), and a party of Reed Buntings (*Emberiza schoeniclus*) were noted. I shot a Yellow-headed Wagtail (*Motacilla citreola*)—the first noted since June last.

A single Quail flushed in some wheat. A small number began to arrive about the middle of the month and the Quail-catchers started operations, but not until next month will the birds become numerous.

A single Swift (*Cypselus affinis*) seen, also two Bay-backed Shrikes (*Lanius vittatus*).

Feb. 5.—Sohawa. A flock of Striated Buntings (*Emberiza striolata*) noted. Visited the ponds where I saw a single Teal and a Full Snipe. Indian Little Grebes (*Podicipes albipennis*) and Coots (*Fulica atra*) are fairly numerous and resident here.

Feb. 6.—Sohawa. A spring of five or six Common Teal on the ponds, the drakes in full plumage.

Returned to headquarters to find my compound full of Himalayan Black Bulbuls (*Hypsipetes psaroides*) which remained about for the rest of this month. During the summer the species is one of the most familiar birds of the Himalayan Hill Stations, its noisy calls being heard all day long. The species is very sociable and entirely arboreal, usually frequenting the tops of the highest trees. The food appears to consist chiefly of fruit, and I noticed that the berries of a Drake tree in my compound were soon devoured.

Feb. 7.—Five Black Vultures (*Vultur monachus*) seen; this fine species has been noted here on several occasions during the winter, being met with for the first time on 17th November. A King Vulture seen.

In the Rak I flushed an immature Merlin (*Falco aesalon*), which was at once chased by a King Crow (*Dicrurus ater*)—a good example of the pugnacity for which the latter is noted!

A great increase noted in the numbers of *Merula atrigularis* which is now very common both in the Rak, and in the compounds of Civil Lines Rooks and Jackdaws continue numerous; but Starlings have certainly decreased in numbers.

A number of Reed Buntings noted in the same place as given in last month's diary.

Feb. 8.—Spent the day on the river, covering the same stretch of water as referred to in last month's diary. There were great numbers of Duck about, of which the majority were Mallard, but Teal, Pintail, Shovellers, and Tufted Duck were also identified. Ruddy Sheldrakes were very numerous in pairs, and in flocks. With one lot of the Sheldrakes were a few Bar-head Geese (*Anser indicus*). A gaggle of some fifteen Geese came flying up the river over my boat, and I dropped one to find it a Grey Lag (*Anser ferus*).

Pallas' Fishing Eagle (*Haliaetus leucoryphus*) was very much in evidence, two or three pairs being met with. One came and looked at but did not touch a Mallard Drake that I had dropped into the water, and another stooped once or twice at a wounded Teal, which escaped by diving.

Sand Martins (probably *Cotile riparia diluta*) had started to excavate their nesting burrows in the high bank of one of the islands, and near by were three holes that evidently belonged to a pair of Pied Kingfishers (*Ceryle varia*) who were sitting on the stones the other side of a water channel and taking great interest in my movements. One hole was probably used as a sleeping place for the male, as there were a number of droppings some way from the entrance. The actual nest tunnel was about two-and-a-half feet long, inclining slightly to the left. The egg chamber was large and littered with fish bones and scales, on which were lying the six eggs, varying from fresh to slightly incubated. It is a curious fact that this species generally seems to excavate three holes fairly close to one another, all much of the same depth. Is there any idea of protection in it?—the hope that an enemy may choose the wrong hole?

Two very large flights of Larks were noted flying low up the river; as they passed I dropped an individual from the second flight, and as it fell its companions settled in close order at once by it; but not securing the bird I failed to identify the species—however they looked like the Indian Skylark (*Alauda gulgula*).

Lapwings, Greenshanks, Redshanks, Stints, and Common Sandpipers fairly numerous about the sandbanks. A Rock Horned Owl (*Bubo bengalensis*) was flushed from under a tamarisk bush on an island. A Great White Heron and a Common Heron seen. One Common Swallow.

The Wall Creeper noted on the 12th January as frequenting a low sandy cliff by the water's edge was found in almost identically the same spot.

Feb. 9th.—Two eggs found in a nest of the Indian Tawny Eagle (*Aquila vindhiana*) placed at the extreme summit of one of a small group of Shisham trees standing alone in the midst of cultivation. The nest was a large flat structure of sticks, lined with twigs, and seed-cases of the Shisham. The female was sitting on the eggs, and the male was perched on a tree by the roadside a hundred yards away.

The fields of growing wheat now afford shelter to large flocks of Skylarks (*Alauda arvensis*); here a very numerous winter visitor.

Several King Crows seen, including a party of seven. In this northerly district a very small percentage are residents, the majority being summer visitors only. A flight of 25—30 Jackdaws noted flying alone, unaccompanied by Rooks.

Feb. 10th.—Another nest containing two eggs of *Aquila vindhiana.* This was placed in a small Kikur thorn tree near a road, and in contradistinction to the majority of nests of this species —which are placed *on* the extreme tops of trees—it was placed more *inside* the tree, in such a position as would be selected by a Kite. When I first found the nest, on the 7th, both birds were at the nest, which then only contained one egg.

A pair of Red-wattled Lapwings (*Sarcogrammus indicus*) turned up in my compound, and both were taken by my Peregrine. Further south the species appears to be equally common all the year round; but here practically all leave for the winter, returning in February and becoming common by the end of the month. The same remark applies to the Indian Swift (*Cypselus affinis*), of which I noted several to-day.

A Blue-throat and a Swallow seen.

Feb. 11th.—There is a distinct falling off in the numbers of Rooks and Jackdaws which come to roost in the Rak. This decrease became more marked as the month went on, and practically all had gone by the last day, only a few staying into March.

Two Reed Buntings, a Black Ibis, and some Jungle Mynahs (*Æthiopsar fuscus*) noted.

A man came round with some Goshawks for sale, which were said to have come from Nepal. They were of of course fairly recently caught and were closely hooded, with the tails swathed in cloth, to protect the feathers. Two males and two females, all but one of the latter being in the first plumage. They were tied at intervals on a long pole, which the man carried by the middle. The prices were temptingly low—about £2 to £10 apiece—as the season is nearly over, but times are hard, and I sent the vendor away reluctantly..

Feb. 12th.—Met with a red-breasted male of the Red-breasted Flycatcher (*Muscicapa parva*)—save during the migration rushes one meets usually only with females or immature males in the first plumage.

Pariah Kites have now begun nesting in earnest—nests in construction or just completed may be met with on all sides.

Feb 13th.—Secured a specimen of the Green-backed Tit (*Parus montanus*) which, although fairly numerous when the commencement of the cold weather brought the Indian Grey Tit (*Parus atriceps*) down from the hills, has of late not been noted. The Grey Tit, of course, remained numerous throughout the month, being usually met with in flocks. One or two have roosted in holes in the roof of my verandah all through the winter.

Feb. 14th.—Very heavy rain all day. The Blue-throat noted on the 10th seen again in the same place, namely, in some pea rows in the jail garden. Pea rows are as attractive out here to birds as at home, various forms of Willow Wren and Red-vented Bulbuls being perhaps the most pronounced habitués. By the way, I may note here that any aviculturist who keeps Bulbuls should see that they are well supplied with green food, for several specimens that I have skinned had the stomach crammed with green-stuff, apparently cut up leaves of trees as a rule.

Feb. 15th.—Great increase in the river and floods out after the rain, especially on the golf course, where I noted four Lapwings feeding. Rain again in evening. A great Grey Shrike (*Lanius lahtora*) seen hovering over a patch of wheat and then moving on and hovering again—for all the world like a miniature Kestrel. Another bird that I have seen doing the same thing is the Indian Little Owl (*Athene brama*). But in neither case was the hovering so long sustained as is customary with the Kestrel.

An Indian Roller seen eating a frog. An immature Grey-winged Ouzel (*Merula boulboul*) obtained.

Feb 17.—Heavy rain again. Several *Hirundo rustica* noted, as well as a small party of Striated Swallows (probably *Hirundo erythropygia*)—a species that breeds in Rawal Pindi District, and in the Murree Hills in numbers, making a retort-shaped mud nest, under rocks and bridges. A few seem to nest in the higher parts of this district also, but the majority are probably only passage migrants.

A female Long-legged Buzzard (*Buteo ferox*) weighing 2¾ lbs. shot in my compound. Its gizzard was packed with the remains of a Crow. This species was reported long ago as breeding in the Salt Range in this district, but there was perhaps some mistake. At any rate it is fairly common in winter, and may usually be seen sitting sluggishly on a tree. One was netted a few days later as it struck at a live Pigeon bait intended for a Peregrine.

Feb. 18th.—A small flock of Pine Buntings (*Emberiza leucocephala*) found on the golf course where they were very busy feeding on the ground, perching in trees and shrubs when disturbed. They were very shy. This appears to be an extension of their range, but I fancy I saw some near Dumman on my arrival in the district last April. In "The Fauna of India—Birds," the range of the species in India is given as only in the Western Himalayas, but it has since been recorded as a winter visitor to Kohat.

Feb. 19th.—Noted a male Pied Bush Chat (*Pratincola caprata*) the first of the season. In this district this cheery little bird is only a summer visitor, being then common and nesting freely. The male is very conspicuous in his pied livery of black and white, more especially as he always elects to perch on some commanding position on a bush or tuft of grass. The nest is placed in holes on the ground amidst herbage. I found one in a deep hoof-mark—one in the cavities in the sides of banks. In the hills this species is often adopted as a foster-parent by the Common Cuckoo.

In the Rak I flushed an Eagle Owl (*Bubo coromandus*), which flew away, carrying a large black object in one foot—probably the remains of a Crow. I have noticed from the remains that litter the ground in the Rak that the mortality must be enormous amongst the hordes of Crows which roost there nightly all the year round, and these large Owls are doubtless responsible for it. In fact it is difficult to see any other suitable food supply for the three or four pairs which live in the jungle there.

A Spotted Dove (*Turtur suratensis*), and a Coucal (*Centropus sinensis*) seen. An immature Peregrine Falcon reported by my Baydar.

The flock of *Alaudula adamsi* continues to haunt the place where they were all last month.

Feb. 20th.—Two Bank Mynahs (*Acridotheres ginginianus*) noted—the status of this species is very puzzling. From the end of May to July it was noted in small numbers, coming to roost with the common Mynahs in the Rak, and occasionally individuals were noted in August, September, and November. It is more lightly built than *A. tristis*, and has the face wattles red instead of orange; the back slaty-grey; and the light parts of the wing and under surface pinkish buff. As its name implies, it is usually found in low riverside pastures, frequenting the neighbourhood of cattle. It breeds in holes in banks, but I have not yet found the nest.

Feb. 21st.—Hearing a wild Peregrine shrieking near my bungalow, I investigated, to find that the trouble was caused by an

Eagle-Owl sitting in the same tree—its solemn face apparently annoyed the Falcon!

A party of Striated Swallows seen in the evening.

Feb. 22nd.—Travelled from Mandra to Chakwal, 37 miles by tonga. Large flocks of Skylarks and Short-toed Larks in the fields all along the road. The Indian Ring Dove (*Turtur risorius*) was also very numerous in flocks along the road.

Two Black-bellied Sand-grouse (*Pterocles arenarius*) noted. Also two wandering Tree Pies (*Dendrocitta rufa*). The only ones that I have seen in the district except in the Salt Range. A flock of Small Minivets (*Pericrocotus peregrinus*).

Feb 23rd.—Chakwal. A Kestrel and a Wall Creeper noted.

I was searching a small stretch of cliffs by a dry water-course, when I noted a pair of Ravens settle on an outstanding corner. Arriving at the spot I saw the nest on a ledge near the top of the cliff, and the female flew off. These cliffs are of very hard earth, which suffers greatly in the rains, large masses being undermined and falling, and great holes being formed, until the outline of the cliff becomes most broken and fantastic. I was able to climb up sufficiently near to stand a few feet below the nest, to the great displeasure of the Ravens, who were very bold and noisy, coming within a few feet of me and perching at the top of the cliff above my head. They were quite calm and collected, in spite of their excitement, for when I threw bits of earth at them, they would wait and see whether they were going to hit them or not, before condescending to move. When one saw that the aim was bad and that the missile would pass a little wide, it would sit firm, merely stretching to one side or the other—the coolest behaviour I have seen in any bird.

The last few feet baffled me, for I could touch the nest but not feel inside; and the rotten nature of the face of the cliff, rendered more dangerous by the rain of the night before, made me unwilling to run further risks. However, I went round to the top of the cliff, but found it was not possible to see clearly into the nest, though I could see something black, which might be a young bird—a most probable guess considering the behaviour of the old birds. Next morning I sent the men with the ladder to the spot in the faint hope of eggs—for hitherto I have always been too late and only found young birds—and to my great surprise they returned with four fresh eggs.

While I was on the top of the cliff some dozen or so other Ravens passed over, but they took no notice of the excitement of the pair that owned the cliff, clearly thinking it no business of theirs. As this took place towards dusk, these Ravens were doubtless on their way (for they were followed by others) to one of the favourite roosting sites. Ravens in Scotland have often been noted for their habit of sleeping in companies, and our Punjab race is in no way different. In March, 1911, near Gujar Khan, Rawal Pindi District I found about 50 Ravens settling for the night with a number of Páriah Kites in some trees; and on the Chakwal-Mandra tonga road—which I have often had to traverse by night during this last year—there are places on the road where on moonlight nights I have seen a large congregation of Ravens asleep in a tree.

Feb. 24th.—Returned along the tonga road, finding another Raven's nest—this time in a tree by the road-side, a much larger nest than the other, and containing four incubated eggs, but the birds, although excited, were not nearly so aggressive as the other pair.

A Stork flying high was probably the Black Stork (*Ciconia nigra*).

Feb. 25th.—Rode out to an enormous cotton-tree on the river bank which is easily the largest tree in the neighbourhood. At the top of the tree is an enormous eyrie of Pallas' Fishing Eagle (*Haliaetus leucoryphus*), the materials of which must form a good cart load. Last year, in April, I examined the nest, which then contained two eggs of the Lugger Falcon, and some relics of its real owners in the shape of a Heron's bill and tarsus. During the rains the nest was practically destroyed, only a few sticks remaining to mark the site, The Eagles returned to the spot at the beginning of September, but November (their usual month for nesting) passed without any repairs being made, so I concluded that they had found another spot and had left this tree; however, I was wrong. The tree is an exceedingly difficult one to climb, owing to its great girth, but with the help of a rope an active hillman ascended and found two eggs in the nest. For some weeks previously one of the birds was nearly always to be seen sitting sentinel by the nest, even when it was empty.

Numbers of Swallows flying about the river, but I could not identify the species. A Kestrel and a Merlin.

A pair of White-cheeked Bulbuls (*Molpastes leucogenys*) have taken to roosting in a tree in my compound every night. This is the first time I have met with the species in Jhelum itself, though it is common in the higher elevation of Chakwal and Dumman during the winter, and breeds freely in the Salt Range.

Feb. 26th.—A pair of adult Sparrow Hawks have taken up their residence in a certain patch of jungle in the Rak, where they are to be found every evening within a few yards of the same spot. I have tried to net them for training on many occasions, but they are too wise to be taken.

An immature Grey-winged Ouzel shot in the Rak.

Feb. 27th.—A very fine adult male Grey-winged Ouzel seen in the Rak—the third noted here this winter, and probably one or two more have escaped notice amongst the numbers of Black-throated Ouzels. The species is fairly common in the Murree Hill Jungles, where it breeds, but hitherto I have failed to find a nest.

A male Dark Grey Bush Chat (*Oreicola ferrea*) in the District Board Garden, close to where I shot a male on 20th October.

A single Pratincole (*Glareola lactea*) noted flying up the river—a forerunner of the hordes that will arrive to breed here in April.

An adult female Peregrine by my bungalow; two Great White Egrets.

There is an enormous increase in the numbers of Starlings which from the beginning to the middle of the month had been steadily decreasing. This probably means the arrival of a fresh geographical race on migration, but I cannot say for certain until my specimens have been critically examined. Rooks and Jackdaws are now becoming very few in numbers. The Black-throated Ouzels have also begun to depart again.

A Grey-headed Flycatcher-Warbler (*Cryptolopha xanthoschista*) seen.

Feb. 28th.—Left for camp on the Chakwal side. The four kinds of Wheatear, *Saxicola picta, S. opistholeuca, S. deserti,* and *S. capistrata* are still about, all except the first in fair numbers.

Book Notices and Reviews.

*SPECIES WHICH HAVE REARED YOUNG, AND HYBRIDS WHICH HAVE BEEN BRED IN CAPTIVITY IN GREAT BRITAIN, by Wesley T. Page, F.Z.S., M.B.N.H.S. Ashbourne, The Avian Press, 1914. Price 2s. 6d. net, post free 2s. 9d.

Only those who have undertaken a similar task can realise the immense amount of labour involved in hunting up and sifting the numerous records incorporated in this valuable work of reference. Although it appeals to but a limited class of readers, yet we imagine that most earnest aviculturists will desire to possess a copy, and there should be very few members of the Foreign Bird Club who are not included in the above category.

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*To appear on May 1st.

Mr. Page is nothing if not up-to-date, as we find him adopting Dr. Gadow's system of classifying birds, which commences with the lowest forms and passes upwards to the concluding Family FRINGILLIDAE.

Opposite the title-page is a very pretty picture of the author's aviary, and besides several other illustrations (chiefly from excellent photographs by Messrs. H. Willford and W. Shore-Baily), there is a most useful diagram showing at a glance the technical names applied to the different parts of a bird—such as even a novice can understand. The brochure begins with two very *practical* chapters, the first being entitled "Breeding Hints," in which the writer very justly lays stress on the importance of supplying an ample and varied assortment of green food to feeding parents, whilst the second chapter is headed "Observation," and in it is inculcated the vast importance of observing minutely and recording accurately all the happenings in our aviaries, including courtship, nesting, egg-laying, incubation, and the rearing of the young.

Next to this chapter comes the list of species known to have been bred in captivity in Great Britain. Seventeen pages are occupied by this list, whereas nine suffice for recording all the Hybrids ever reared in the same area. Special thanks are accorded to Lord Tavistock for many Woburn Abbey records included in both these lists.

The remainder of Mr. Page's excellent work is given up to three Appendices, whereof the first contains a list of species reared in continental aviaries only, and the second a similar list of hybrids—neither of them claiming to be complete, but being none the less interesting.

In the third appendix we find a most useful list of Canary Crosses, all of them, except that of the Indigo Bunting, having been effected in Great Britain. In this list it is explained that in all the twenty-five crosses the hen was a Canary, but it is, we think, a little doubtful if that fascinating mule the Canary-Bullfinch has ever resulted from the mating of a hen Canary with a cock Bullfinch, and we quite agree with the author that confirmation is required as to the parentage of the birds tabulated as Orange Weaver × Canary.

When we add that our Editor's work is copiously interleaved, and possesses that greatest essential of all books of reference—a full and accurate Index—we think we have said enough to induce every reader of this review to lose no time in securing, whilst he may, a copy of this indispensable and trustworthy compilation. G.H.R.

Editorial.

STREAKY-HEADED GROSBEAK (*Poliospiza gularis*). A few of this uncommon species, which has not been on the market for some time past, have come to hand recently, and a male has passed into Miss St. A. Wait's possession, who finds it a pleasing acquisition; she stated: in size and build similar to St. Helena Seed-eater, but more graceful and their call notes are similar; is vivacious, happy, contented, alert and promises to become very tame; a delightful and attractive cage-bird, and has a pleasing and fairly varied song, certainly not at all monotonous, with some of its notes rather like a Robin's. The plumage is a soft grey all over, but the head is streaked with dark grey, the throat is white and the breast a lighter grey than the upper parts—thus Miss St. A. Wait speaks in high praise of her acquisition and finds it a delightful pet.

Andersson in his "Birds of Damara Land" states that he met with it very sparingly in Great Namagua Land.

HUMMING BIRDS IN EUROPE: A French aviculturist has recently landed fourteen of these charming sprites of the feathered-world as follows:

Ruby-throated (*Sulampis jugularis*); a gorgeous creature resplendent in glowing ruby, purple, blue and sapphire.

Smaller Emerald (*S. holosericeus*); this species has a garment of golden-green, spotted with blue on the underparts.

Sapphire-crested Bellona *(Bellona exilis)*. A fairy sprite the size of queen wasp, with a huge sapphire aigrette on its head.

The above were collected at various ports and tended during the return voyage by the importer, and from his communication are landed in such a condition, that there is prospect of them enjoying a long life in his aviaries.

Of *Bellona exilis* the importer writes: "He is the "dearest little fellow and so perky and cheeky in spite of "his size. He always takes his food hovering—in fact hardly "ever perches. I understand it to be the smallest of Hum-"mers. The difficulty was not to get them to live, but to obtain them."

He also obtained three Blue-headed Manakins (*Pipridae*), which are new to European aviculture. A sketchy description is: top of head blue, mantle deep bluish-black; abdomen orange. The hues are iridescent.

A pair of Banana Quits completed the consignment. Nineteen birds obtained by infinite expense, time and trouble.

The importer is certainly to be congratulated on a great achievement, and we hope that the birds may enjoy a long, and happy life in their French aviary.

From All Sources.

THE ORIGIN OF NEW BREEDS.

"There has been a remarkable crop of striking colour varieties among fancy animals of late years. We have had the White Canary and the Blue Budgerigar, or Australian Lovebird, appearing at our bird shows, and yellow rats, long a desideratum among the admirers of this usually unpopular rodent, are now being fixed as a breed."

"In the case of the two cage-birds above mentioned, the varieties are not in themselves new appearances. White Canaries have been reported before the strain we now hear most of was obtained and fixed on purely Mendellian lines by a lady aviculturist in New Zealand, who found the white form was a typical 'recessive.' Blue Budgerigars, which, repeating in blue and white the pattern of green and yellow so familiar in the 'fortune-telling bird,' have attracted great attention by their extreme beauty, were in existence nearly a generation ago, and seem to have arisen nearly as early as the now well-known and freely bred yellow form of this popular foreign bird."

"Possibly, however, this variation has also appeared more than once, and in any case the fact remains that, in spite of the high prices obtainable for Blue Budgerigars, the breed of this colour has not been multiplied greatly, and the specimens that turn up are generally very weakly-looking. This is curious, as they seem nearer the typical bird than the yellow breed, having the same black pencilling; but one difficulty in breeding them appears to be that females among blues are produced far more freely than males, so that it is difficult to get the latter mates of their own colour, and much in-breeding has probably been practised, a proceeding particularly deleterious to these little Parrakeets, hardy as their constitution is."

"One very great point of interest about these new, or comparatively new, colour-forms. is the evidence they afford against the idea, combated by Darwin, but now inclined to crop up again among students of animal variation in domestication, of the multiple origin of our domestic animals. We know definitely that these new variations in rats and birds were not produced by crossing with alien, but allied, species. The rats were bred from yellow varieties of common rats caught in the wild state—spontaneous variations with the production of which man had nothing to do. The Budgerigar stands very much alone among the parrot family; there is no species near enough to it to be crossed with it with any hope of fertile hybrid resulting, and, as a matter of fact, hardly any small Parrots have blue as the prevailing colour, though there are Blue Macaws."

"FEATHERED MULES. The White Canaries were bred from ordinary Canaries, and, in fact, the breeding of Canaries with other Finches has conclusively proved that, so far from species-crossing among such birds producing colour variation, it actually inhibits it. If a Yellow Canary be mated with a wild Finch of another species the result is almost always a dark-coloured bird, resembling the wild Green Canary in depth of colour, the 'light mule,' which shows much of the Canary yellow, being so rare as to be excessively valuable. Similarly, the equine mule, though more variable than the ass, as it usually shows horse colours, is less so than the horse istelf, as it is very rarely pied or spotted. Besides this, Finch-mules, like the equine mules, are generally, if not always, sterile, so that any breed-modification by crossing in the case of these animals is out of the question."

'The only certainly known case in which two distinct wild species of animals, near enough to produce fertile hybrids, have been crossed in domestication is that of the Goose; the Chinese Goose, so familiar in our parks, being the ordinary domestic goose of the East, and crossing freely, with quite fertile results, with the specifically distinct domestic Geese of Europe. Yet, on the whole, hybrids between these two Geese are relatively very rare, and the domestic Geese of the world can be definitely referred to one species or the other, and do not form a composite race; the tame Geese of India, regarded by the observant and accurate Blyth as a hybrid race, being certainly nowadays, to all intents and purposes, pure Chinese."—From the *Daily Standard*, 21-iii.-'14, per REV. G. H. RAYNOR.

Correspondence

BREEDING RESULTS—1913.

Sir,—Last season was not so good with me as previous ones have been, and only the following birds were successfully reared:

Zebra Finches (*Taeniopygia castanotis*), ten from one pair.

Stanley Parrakeets (*Platycercus icterotis*), three.

Magpie Mannikins (*Amauresthes fringoillides*), bought as a pair, but are two hens, twenty-eight eggs were laid during the season.

Kendal, Feb. 15th, 1914. J. SMITH.

SILVERBILL HYBRIDS, ETC.

Sir,—It will probably be of interest if I give a few notes of the rearing of Silverbill × Bronze-wing Mannikin Hybrids in my small aviary last year, as I do not think this particular cross has been previously bred in Great Britain.

The birds were bred in an out-door aviary, 12 × 6 × 6ft. high, 4 feet of this length being given up to the shelter, the remain-8ft. forming an open wire flight.

They chose a wooden nest-box for their home and snugly lined it with hay and feathers. In due course a clutch of eggs was deposited therein, upon which the hen sat for the whole period of incubation, the result being four young hybrids duly hatched out; all went well; they left the nest when about three weeks old. In the nestling plumage they were like very dark coloured Silverbills, but quite a radical change took place at the moult.

I am not good at describing plumage and I will take an early opportunity of sending you one for inspection. After the moult their colouration was roughly as follows: Above dark brown; flight and tail-feathers black; below cream-colour, with brown breast barred with darker lines, and spangled on the thighs. There is considerable variation among them, in fact no two are alike; one has some spangling on the breast. Three of them have been kept indoors, in a big flight, but the other one has been out all the winter.

In the aviary last summer were pairs of the following species: Cordon Bleus; Avadavats; Cutthroats; Steel Finches; Orange-cheek, Grey, and Gold-breasted Waxbills. Also odd cocks of Gouldian, Diamond, Lavender, and Zebra Finches; Chaffinch; Orange Bishop; and Java Sparrow. The Chaffinch I picked up four years ago with a broken wing, and he has been living happily in the aviary ever since.

The Cordon Bleus had three broods, of which three were reared to maturity.

The Cutthroats had numerous clutches of eggs, but only incubated the last and two young birds were fully reared.

The Avadavats nested and laid eggs, but would not incubate.

In conclusion, I may say that the young hybrids reared were from the second nest; the first nest only produced one young bird which was killed the day it left the nest by the cock Steel Finch.

Webbery, Bideford, Devon, 29/3, 14. (Mrs.) MARY BOYD.

AVIARY NOTES, 1913.

Sir,—In response to your enquiry, I am sending you the following notes. I did not send them before, as I thought that they were hardly interesting enough.

Blue-wing Sivas (*Siva cyanuroptera*). A pair of this species went to nest, laid, and then deserted; why, I have never found out. We had two true pairs, but fog killed them all. I do not think this species can be as hardy as Mesias.

Silver-eared Mesias (*Mesia argentauris*). This species appears to be quite hardy, for they have been out all year, and now (February 1st) both pairs are absolutely perfect. The aviary which one pair have occupied has practically no shelter, yet they have never had a day's illness. Last year one pair—our old pair—got as far as young ones again, but they did not bother to rear them. I wonder if they ever will.

Grassfinches. The attempt to breed from the hybrid Long-tailed Grassfinch × Parson Finch cock and a Long-tailed Grassfinch hen never came to anything.

Gouldian Finches (*Poephila gouldiae*). We had a pair of Yellow-heads, but the cock, as already recorded, died almost at once, and the hen, though she lived some little time, never got really fit and ultimately followed him. This variety does not seem to be nearly so strong as the Black-headed or Red-headed, but perhaps they were unhealthy specimens.

I do not think we have lost any Gouldian Finches, except those imported last year, and not many of those—about six in all. That is to say those imported in 1912, and those bred in 1912, also those bred last season (1913) are all well—in fact they seem fairly established now. Those bred last season—12 in number—were mostly from the aviary-bred ones of 1912.

Diamond Sparrows (*Steganopleura guttata*). These have nested freely and had about eight young ones, which have died off in a most disappointing way.

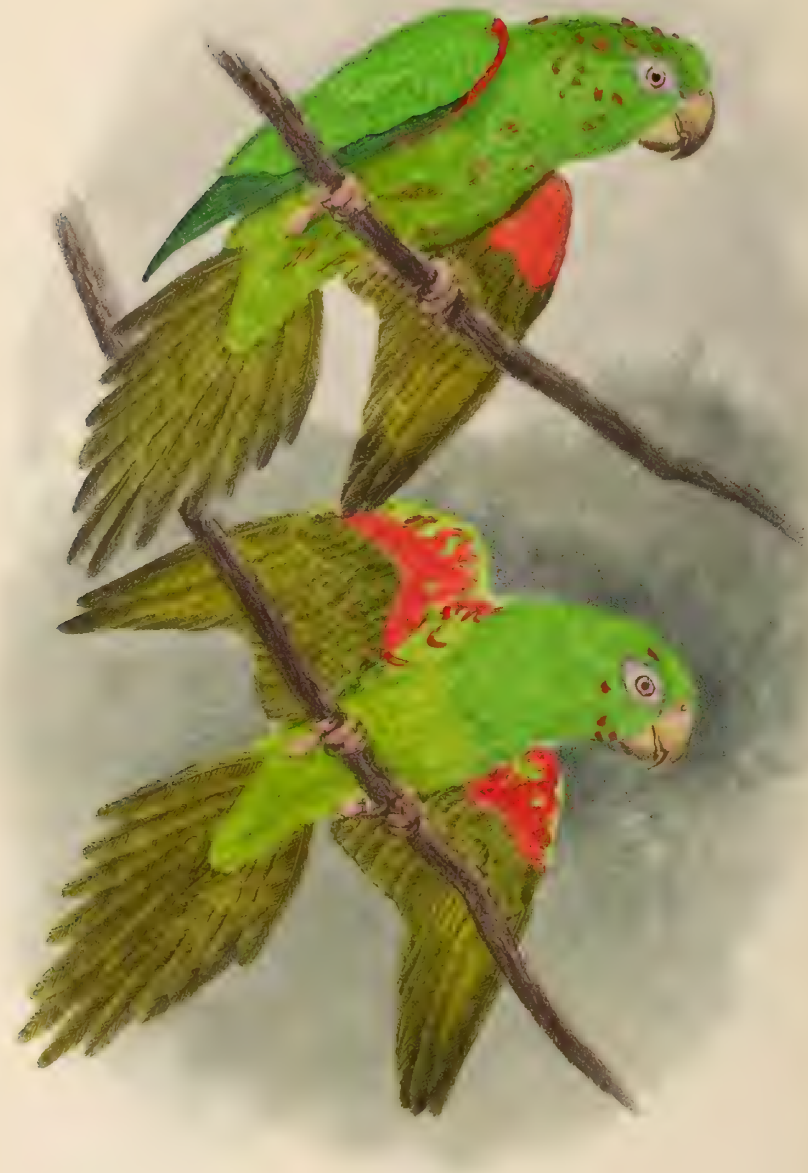
Ruficauda Finches (*Bathilda ruficauda*). With these there has been no result, though nests have been built and eggs laid.

R. S. DE Q. QUINCEY

Post Mortem Reports.

Vide Rules (See Page iii of Cover.)

None to hand at time of going to press.—Ed.



RED-SPOTTED CONURE

Conurus euops.

From Life

Huth imp.

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BIRD NOTES:

— THE —

JOURNAL OF THE FOREIGN BIRD CLUB

The Speckled Conure.

(*Conurus euops*).

BY DR. L. LOVELL-KEAYS.

This Parrakeet is perhaps one of the latest additions to the already large number of Conures known to aviculture. They apparently inhabit some uninhabited islands off the Mona Islands near Porto Rico or St. Domingo. The usual English name is the Speckled Conure, but speaking for myself I should call them the Crimson-flanked Conure as being more descriptive and certainly more euphonious. I was fortunate enough to obtain an adult, and I believe true pair from Mr. Cross, last March, and although a little rough and with one wing clipped, they came to hand in very fair health and condition. They have caused no anxiety as to their health since, and from being timid wild birds have steadied down nicely. In general demeanour they are distinctly thoughtful and contemplative, thinking wisely and incessantly to while away the lagging hours. One feels that the words "*tempus fugit*" have no meaning for them except in a satirical sort of way. They remind me of the old almshouse inhabitant, who on being asked how he amused himself all day, said, "Sometimes I sits and thinks and at others (for a change) I just sits." Apparently they do have moments either of exaltation or exacerbation. for I hear them sometimes expostulating at the very top of their voices, but when I appear a settled calm pervades the bird-room, and they return to their owl-like thinking.

THE GENERAL COLOURATION of the birds is well shown in Mr. Goodchild's excellent plate, and is a rather pleasing soft, olive-green, with that peculiar kind of polish to the feathers, rather characteristic of the Parrot family, so strongly suggestive of a much ironed top-hat. The bird is quite graceful in build, slim, and well proportioned, with the usual Conurine tail.

The Body measures 6 inches in length (tail 6½), and is as I have said, slim rather than the reverse. The hen is somewhat smaller and more slim than the cock. The general colour of both is bright olive, suffused with a dull emerald green; the neck and shoulders are speckled with bright red, somewhat rectangular spots, thicker on the head and neck and less numerous on the shoulders. On the breast too we find faint coloured spots of a duller red tint, but these appear to be absent or nearly so in the female. The breast feathers appear to be somewhat yellower and lighter than the upper plumage, but over all there is an exquisite sheen of bright emerald green, visible only in certain lights, of course.

The Head is similar to the head of most Conures, with a somewhat short neck and a very pronounced beak. The beak is flesh coloured with very distinct nostrils at the base, and as is usual in Conures, the nostrils are quite bare. The head in the male is considerably larger whether viewed laterally or from above, and is distinctly flatter. The upper mandible in the male is larger from above downwards, and considerably broader from side to side (at the base), this is very obvious when viewed from above. The upper mandible in the male is more hooked. To illustrate my meaning: If the beak was prolonged it would enter the breast three-quarters of an inch below the lower mandible, whereas in the hen it would enter the breast two inches below the lower mandible. The result of this is that the slit of the "mouth" in the female makes an angle of 30 degrees with the horizontal, whereas in the male it is 60 degrees.

The Eye is surrounded by a flesh-coloured circle of bare skin giving the bird a peculiar bald look. This bald patch is roughly oval in shape and appears of equal size in the two sexes. The Eye itself is larger in the male than in the female—is bright golden yellow in the former but somewhat of a hazel tint in the latter.

The Wings are long and pointed, and the primaries overlap the tail to a considerable extent, and are obviously designed to give the bird a quick and twisting flight, which is so characteristic of Parrakeets. Externally they are bright olive green but at the shoulder we see the under

Weavers' Nests constructed in Mr. S. Williams' Aviary.

scarlet feathers just showing themselves. Mr. Goodchild found that vermilion exactly represented these red feathers. It is on lifting the wing that the true beauty and gorgeousness of of these Parrakeets is seen. In the male the whole flank and under wing coverts are a bright scarlet compared to which the Orange-flanked Parrakeet (*Brotogerys pyrrhopterus*) is positively insipid. The female is somewhat less vividly coloured, and the scarlet band is narrower than in the male. These points are admirably shown in Mr. Goodchild's correct drawing, the accuracy of which I can vouch for, as I held the bird with open wing while he carefully painted in the colour areas.

THE TAIL consists of sixteen feathers and is about the same length as the body, viz: 6 to 6½ inches. The median feather is 1½ inch longer than its fellows, the shortest of which appear to be 3 inches in length and the intermediates 3½ inches. The tail feathers are bright olive green above and dull yellowish-olive below. The shaft is dark brown on the upper surface and olive on the under surface.

THE FEET present no peculiar features. They consist, of course, of four claws, two anteria and two proteria as in all the Zygodactyls, and are flesh-coloured.

In conclusion I will add, that at present the birds are housed in a Parrot Cage, having one wing cut. It is very risky letting birds, which cannot fly, loose in an aviary, but as soon as the primaries are moulted out and grown I shall let them loose and I am sure the spectacle will indeed be a sight for the gods when viewed from beneath, and we shall form quite a different opinion of their characters and appreciate the marvellous beauty that a splendour-loving nature has endowed them with.

As regards diet, they are very frugal and have the usual ordinary Parrot mixture on which they appear to thrive excellently.

◆

My Weavers and Whydahs.

BY SIDNEY WILLIAMS, F.Z.S.

For some years past I have devoted myself to collecting as many different species of these two allied groups as my purse would allow and the aviary accommodate.

Our Editor has asked me to write an article giving my experience with these birds and I have much pleasure in complying, and venture to hope it may interest many of my readers.

As most foreign bird keepers know, the general idea is, that the Weaver family are not safe to keep with other birds. They are credited with every vice which is known in the bird-world. Evidently those who started this rumour, must either have had very little experience or the bad luck to come across a few feathered hooligans. Because you come across a bully in a school, you would not dream of dubbing every school-boy a bully; no, certainly not! Well then, why give every Weaver a bad character?

At the present time my collection is as follows:—

1 pair Rufous-necked Weavers (*Hyphantornis cucullata*).
1 ♂ Rufous-necked Weaver (*Hyphantornis cucullata*).
1 ♂ Black-headed Weaver (*H. melanocephala*).
2 ♂ and 1 ♀ Baya Weavers (*Ploceus baya*).
1 ♀ Yellow Weaver (Sp. uncert.).
*5 ♂ Short-winged Weavers (*Hyphantornis brachyptera*).
5 ♂ and 1 ♀ Crimson-crowned Weaver (*Pyromelana flammiceps*).
1 ♂ Mahali Weaver (*Plocepasser mahali*), rare.
2 ♂ Prince's Island Weavers (not certain as to identification—not yet full colour).
1 ♂ Taha Weaver (*Pyromelana taha*).
2 ♂ Napoleon Weavers (*P. afra*).
1 pair Small Masked Weavers (*Sitagra monacha*).
1 pair Red-billed Weavers (*Quelea quelea*).
2 ♂ Red-headed Weavers (*Q. erythrops*) uncommon.
1 ♂ Grenadier Weaver (*Pyromelana oryx*)..
1 ♂ Bronze Abyssinian Weaver (*Cinnamopteryx rubiginosa*), rare.
4 Weavers which have yet to be identified.
1 pair Paradise Whydahs (*Steganura paradisea*).
3 ♂ Pintail Whydahs (*Vidua principalis*).
2 ♂ Red-shouldered Whydahs (*Coliopasser axillaris*).
1 ♂ Golden-backed Whydah (*Penthetriopsis macrura*).

*Two bred last year in my aviary.

A big Half-masked Weaver died in a fit early last year, and I have also lost since: 2 ♂ Orange Bishops, 1 ♂ Russ' Weaver, and a Comoro and Madagascar Weaver died soon after arrival, so I have a few vacancies to fill up.

This makes about twenty different species of Weavers

I have kept during the past five years; I think, therefore, I may claim to have had a little experience with these, so-called pugnacious birds.

My aviary is only a small one, about 10 x 11 x 7 feet high. In this my Weavers were flying loose with:

1 pair Long-tailed Grassfinches (*Poephila acuticauda*).
4 Grey Singing Finches (*Serinus leucopygius*).
2 ♂ Linnets.
2 Goldfinch Mules.
1 ♂ Greenfinch.
1 ♂ Aurora Finch (*Pytelia phoenicoptera*).

One young Canary was killed and one adult had its leg bitten; these two got out of a cage hanging on the wall - this was the sum total of maimed birds, so I must leave it to my readers to judge for themselves whether Weavers are as black as they are painted. Do not misunderstand me, I do not make them out to be as "peaceful as Doves"—they certainly do spar among themselves, but not one jot more than Zebra Finches, Cutthroats, and Grey Singingfinches, or even the Grey Java Sparrow. The latter I consider to be a more dangerous aviary bird than any of the Weaver-tribe, for he is given to biting the legs of the other occupants.

Now, as regards the species I have found the most troublesome: The Rufous-necked when breeding is the most spiteful; next comes the Half-masked and sometimes the Orange Bishop. The Grenadier is said to be quarrelsome, but only having kept one and that a very tame individual of this species I will say nothing definite. The Baya is continually sparring with a young cock of his own kind, but does no damage to the other birds.

As regards pulling the nests of other birds to pieces, Weavers simply must build when the breeding season is in full swing—no matter whether you keep only cocks or pairs, they will spend a great portion of their time weaving those wonderful retort shaped nests, mainly as a pastime, as very few of them seem inclined to take on family cares. The photo is of a few nests built by the Red-billed, Red-headed and Short-winged Weavers in my aviary last summer. In order to show how tame Weavers can become I may remark here that I have three which will feed from the hand in the aviary. Having thus tried to prove that they are not really so bad as they are painted, I will now try to give a few reasons why, I think, they should be more popular than they are:

1. They are long-lived and hardy—Dr. A. G. Butler has recorded the following instances of longevity in his aviaries. "Napoleon 12 years, Orange 10 years, Red-billed 14 years, Black-headed 5 years, Madagascar 12 years, Comoro 7 years, Baya 8 years, and Grenadier 3½ years (still alive)."

Such birds are worthy a place in every collection. Many times during the past few winters I have broken the ice in their water pans in my aviary, and they have taken a bath as soon as fresh water was put in, and never been any the worse for their tub.

2. They can be bought for a few shillings (that is a goodly number of them), and where the aviculturist has to count the shillings before he spends them, this must prove a good asset in their favour. The usual price for Orange, Napoleon, Crimson-crowned, and Short-winged Weavers runs from three to six shillings, according to time they have been over and whether in or out of colour; a "Freely Imported Species" is not worth more than 5s. 6d. in colour or out, but aviary or cage moulted specimens may possibly realise 10s. 6d. or more.

If you are to get the full colour of the wild from imported birds you must resort to colour feeding*. Some say you cannot get this back, *the reds only come orange*. If any of my readers were at the 1913 Horticultural Hall (L.C.B.A.) Show, and remember the Crimson-crowned I exhibited, I fancy they will alter their opinion. I was asked if it was "freshly imported" because its colour was so good. I replied no, have had him in a cage five years and he gets deeper in colour each moult. He takes, like most of my birds, tasteless cayenne pepper mixed with egg and ants' cocoons, also a plentiful supply of mealworms, and, to this I attribute his fine colour.

(*To be Continued*).

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*My experience of the Weavers has been a pretty lengthy one, and in the garden aviary, at any rate, I have not found the fiery reds and scarlets of this group fugitive, or in isolated cases only temporarily so.—Ed.

The Secret of Keeping Gouldian Finches. What is it?

By R. S. de Q. Quincey.

Gouldian Finches seem to be the cause of much vexation to bird-lovers on account of their unfortunate habit of dying off without apparent reason or warning, but, I do not really think that Gouldians are delicate if treated in the proper way and given the proper accommodation.

The question is what is the proper treatment? Unfortunately no one knows for certain; but, as for the past two seasons I have been successful above the average with these beautiful birds, I think it is only right that I should let others know my treatment, which may, for all I know, be a solution of the problem.

To start with I will say a little about how I used to keep Gouldians. I commenced with three pairs (two pairs Black-headed and one pair Red-headed), which I kept in an outdoor aviary, the flight of which was 18 x 9 feet with a shelter 9 x 4½ feet. This shelter was very exposed and the aviary faced east. The flight was turfed, and had one small rhododendron bush in it, besides bundles of pea-sticks. They made no attempt to nest, but sat in the shade of the large leaves of the bush when it was hot. From this I gathered my first point: Gouldians need natural shade in the form of leaves, and large leaved evergreens appear to me to be the best. But all these, except the Red-headed hen, which was killed by a Saffron Finch died in November from fogs, and consequent lung trouble. They needed more shelter, not to be shut up in, but to which they could resort at will. Their diet was canary seed and water—this was in 1907.

In 1910 I procured two pairs of the Black-headed variety, which were diseased when I got them, and only lived a short time; they were kept in a coach-house that had been converted into an aviary. However, they did not, I feel sure, get sufficient exercise. Here come, therefore, two more points: Firstly, they need heaps of space in which to take exercise if kept in a cold aviary, for I do not keep birds in cages unless it is absolutely necessary, even in winter; and secondly, despite what others say, I firmly believe in a flock, for these, otherwise sluggish birds, then sometimes squabble a bit, never doing one another any real harm or interfering with each others nests, but chase each other about somewhat and thus they do get some exercise, keep fit and apparently happy, for the cocks are continually singing against one another, and in a flock there seems to be competition which is otherwise lacking.

If anyone does keep a flock I should suggest that they keep them in an aviary to themselves, or possibly with a few soft-bills, but with no other Finches as they seem better without such company, whereas soft-bills do not bother about them, nor they about the soft-bills.

Another point: Cocks are generally in better condition than hens, and are at any rate more ready to nest, therefore, always run three hens to two cocks. I have found that this answers excellently, and that breeding results are better.

Thus in 1912 I bought three pairs and three extra hens from that splendid consignment at De Von's I had several birds caught up and put into separate cages, leaving them to quiet down for a quarter of an hour, and then weeding out the fluffy ones. This is a good plan and it is worth paying a little extra and getting really healthy birds, instead of being content with the first pair that is caught up. I did not lose one of these until the winter, and bred eighteen young ones from three hens (one went to nest twice). I lost two cocks and a hen in the winter, and four young birds were poisoned.

The following year, 1913, I bought more in the same way, but they were not such a good lot (2 Red-heads ♂ and 1 Black-head, also 2 ♀ Black-heads), and later a pair of Yellow-heads, and a ♂ each of Red- and Black-heads). I kept the Yellow-heads separate, but they were never strong and both died during the summer. I then turned the remainder (12 or 14) of my young birds into an aviary 30 × 10 feet, with a shelter 10 feet × 6 feet., while the old ones and those purchased that year were next door, in an aviary 36 × 24 feet. The result was that the young ones wanted to get to the old ones and *vice versa,* so that nothing happened till August, when I let the young and old into the same aviary. Then only three nests were reared, twelve in all, and all these are still alive. Quite a lot of old ones have died during the winter, but what are left are as "hard as nails." viz. twelve youngsters and four pairs of old ones.

You are bound to lose the imported ones after a time, but the young ones seem to live well, which is very gratifying.

Last winter they were all in an aviary 36 × 24 feet, with an unheated bird-room 18 × 8 feet, which had a small trap door through which they had to come in to be fed (all food being kept under cover); they mostly roosted outside, though some came inside when it was really cold.

Being so kept they are quite hardy, since all the soft ones get weeded out. One pair is already breeding, another building, whereas, if kept in a heated bird-room and put out in say, May, they would not have settled down till July or August. They prefer Hartz-travelling-cages for nest-boxes, but also use other converted travelling-cages.

I have now got a hardy flock of twenty birds, and all roost outside under rhododendron leaves in a place where they get the early morning sun.

I must not forget to mention that archangel mats were put three-quarter way along the east side of the aviary, to stop the cutting east winds, which Gouldians do not like, and also that the aviaries face due south.

The Goulds now get: Canary seed, millet sprays, and water, which is always boiled—this, I consider, is an, if not the most, important part in connection with feeding Goulds and other birds, and I know that there are others that will, and do, agree with me.

Personally, I attribute my success with these Finches almost entirely to boiled water, and I do hope that keepers of Gouldians will always give it to their birds also, as the little extra trouble is amply repaid.

◆

The Secret of Keeping Gouldian Finches. What is it?

By Dr. L. Lovell-Keays.

Our Editor has written and asked me how we are getting on in the matter of letters and so-forth. So far I have had several very interesting and helpful letters, whereas, all admit the necessity for determining the reason for our losses, yet up to the time of going to press nobody has satisfactorily explained them. We do hope our members will not leave it to a few willing hands. I think the points most likely to throw light on the subject are as follows:

(*a*) Whether the bird was an imported or an aviary bred one?

(*b*) The approximate dates of their births or arrivals?

(*c*) How had they been treated: (1), Prior to coming into your possession; (2), Afterwards, especially as regards:

(*d*) Accommodation, what have they had as regards heat, inner and outer flights, what are the prevailing winds of the district, what soil and subsoil?

(*e*) Was it, or is it kept in cage or aviary?

(*f*) Have they nested, if so, with what result?

(*h*) Any other points you may think worth noting:

(*i*) The cause of death if known.

(*j*) Any details that can be given as regards longevity of any young that have been reared.

In mentioning birds distinction should be made between the sexes.

If we can get sufficient data under these different headings we shall be a long way towards solving the problem.

[We would urge all who have kept Gouldians at all, to respond to the request for data as to their experiences with them—it is by such means that we can mutually help each other and also aviculture generally, and, we again urge members not to prove unresponsive, but to seriously co-operate in the solving of this, and in the future, we hope, other similar problems.—Ed.].

◆

An Easter Tour Among Members' Aviaries.

By Wesley T. Page, F.Z.S., Etc.

At the beginning of April, our Member, Mr. G. E. Haggie, of Oxford, wrote and asked me if I could spare about ten days to accompany him on a motor tour in the south and west, and, that it would be nice to view as many aviaries as possible *en route*. Well, I consented, and in consequence the club had to put up with the late appearance of April "B.N.," and a somewhat indifferent issue, I fear.

On Thursday, April 8th, Mr. Haggie and I met at Mr. Bainbridge's, Thorpe, Surrey, this being the first avicultural call. Mr. Bainbridge being on a voyage to Australia and back for the benefit of his health, we, of necessity, viewed the aviaries in his absence our next call being the writer's aviary at Mitcham, followed by visits to Dr. J. Easton Scott and Mr. Warren Williams at Wallington; but perhaps before noting what we saw I had better briefly review the route taken, which will leave the way clear for noting the various aviaries visited in proper sequence. On Good Friday morning an early start was made for East Hoathly, Sussex, stops being made at Major Horsbrugh's, Oxted, and Mr. Scott-Freeland's, Tonbridge, on the way, Friday night was spent with Dr. Lovell-Keays; Saturday was spent at Hastings where we lunched with Mrs. Hartley, returning to Dr. Lovell-Keays where we stayed another night. Just about noon on Easter Sunday we said good-bye to our host and hostess and started for Brighton where we lunched with Mrs. F. Johnson (Major Johnson being away on a short visit in Canada), and after seeing the birds, left for Southsea, and on arrival at once crossed to the Isle of Wight. On Easter Monday we looked over Mr. Willford's aviaries (their owner being away on a photographic visit to Spain), and in the afternoon inspected Mr. Yealland's stock at Binstead. On Tuesday morning we crossed from Yarmouth to Lymington, where we again boarded the car, our first stop being Beaulieu, where we visited the aviaries of Dr. P. Gosse and Mrs. Turner-Turner, thence to Lyndhurst to see Miss Chawner's aviaries and birds. Here we had lunch, saw the garden and birds, and then set out for Mrs. Connell's at Brockenhurst, who like ourselves was holiday making. We then visited Mr. G. E. Rattigan who has lately moved to Brockenhurst, and put up at an hotel for the night. On Wednesday we made an early start as we had the longest day's run of the tour before us, our first stop being at Miss Bousfield's at Bournemouth, lunching with Mr. Pike, at Wareham, then passing on to Exmouth where we put up for the night. On Thursday morning we made an early start for Poltimore Park; unfortunately Lord Poltimore was not at home, but we did the aviaries as thoroughly as time permitted, and then passed on to Mrs. Pope's at Tiverton, with whom we lunched; thence to Baronne Le Clement de Taintegnies at Minehead, putting up for the night with Mr. Westacott, of the Wellington Hotel, at the same place. On Friday we left for Taunton where we lunched with Mr. Sprankling, and then passed on to Westbury to Mr. Shore-Baily's, with whom we stayed till after lunch on the following day, bringing an interesting and pleasant tour to an end by the final run via. Devizes to Oxford.

Of the lovely panorama of pastoral England and its southern coast line, or the wild life glimpsed as we passed through, it must suffice to say that of nature's beauties in all their aspects, visionally and mentally, we drank our fill. Of the wild birds met with, I will refer to later in part; we saw sufficient to indicate that many species were busy reproducing their kind, we heard more than we saw, but we glimpsed such species as Tree Creepers, Nuthatches, a Jay, and many Gallinaceous birds continuously the prospect was pleasing, the disporting of the wild creatures of the air entrancing, filling space with their activity and the air with melody in fact, in the beautiful weather prevailing all nature seemed to "rejoice and be glad" (the time of the flowers and the singing of birds was come) and we participated. But, I must not linger, this is an Avicultural Journal, and I must keep this fact strictly in view, and pass on to describe the aviaries visited and briefly review their occupants.

MR. BAINBRIDGE'S AVIARIES: As these have been recently figured and described (*vide* "*B.N.*" November, 1913) it will not be necessary to repeat details. Many of the birds have had full range of the respective flights all the winter and very fit and robust they looked too, including a small flock of Gouldian Finches not yet in full colour. Others, principally the later acquisitions were given cage accommodation either in the shelters of the respective aviaries, or in a temperate greenhouse.

In the new aviary we noted the following species among others :—

Indian White-eyes.
Yellow-winged Sugarbirds.
Californian Quail.
*Cordon Bleus.
Long-tailed Tits.

*Gouldian Finches.
Red-headed Finches.
*Bicheno's Finches.
St. Helena Waxbills.
*Gold-breasted Waxbills.

Mr. W. T. Page's Garden Aviary.

Photo by E. O. Page.

*Grey Singing-Finches.
*Long-tailed Grassfinches.
*Cuban Finches.
*Firefinches.
*White Java Sparrows.
*Diamond Doves (incubating).
*Orange-cheeked Waxbills.
Pin-tailed Parrot Finches.
Scaly-crowned Finches.
*Zebra Finches.
*Jacarini Finches.

*Been out all winter.

All vigorous and in excellent plumage.

In the old aviary was also an excellent crowd of birds including quite a flock of young and adult Gouldian Finches, which though they had been out all the winter looked the picture of health and vigour, and certainly give promise of a successful Gouldian season in these aviaries. We noted the following species among others:—

Quail Finches.
*Alario Finches.
*Ruficauda Finches.
*Cuban Finches.
*Gouldian Finches.
*Jacarini Finches.
*Diamond Finches.
*Scaly-crowned Finches.
*Zebra Finches.
Long-tailed Grassfinches.
Pin-tailed Parrot Finches.
*Diamond Doves.
*Bengalese.
Blue-breasted Waxbills.
Violet-eared Waxbills.
St. Helena Waxbills.
*Grey Waxbills.
*Gold-breasted Waxbills.
*Orange-cheeked Waxbills.
Long-tailed Tits.
Tree Creepers.
*Hey's Partridge.
*Firefinches.
*Pelzeln's Saffron Finches.
*Bronze-wing Mannikins.
*Tri-colour Mannikins.

*Been out all winter.

Also an hybrid Tri-colour Mannikin × Bengalese, and what the writer took to be a hybrid Scaly-crowned × Zebra Finch, a most handsome and interesting bird. Several species were already nesting, a brood of Mannikin hybrids being almost ready to leave the nest—have since flown and are doing well.

Mr. Page's Aviaries: Some other pen ought to have noted these, as the writer will say but little about his own modest equipment and series. The accompanying photo-reproduction figures the aviary and a ground plan has been already given in "Bird Notes"; their appearance was much marred by general untidiness, the spring-clean not being complete. Among the occupants are the following species:

*Plumbeous Redstart.
*Black Tanagers.
*Archbishop Tanagers.
*Grey-wing Ouzels.
*Malabar Mynahs.
*Virginian Cardinal,

Gold-fronted Fruitsuckers.
Yellow-winged Sugarbirds.
Indian White-eyes.
*Grey Finches.
*Guttural Finches.
*Olive Finches.
*Plumbeous Finches.
*Zebra Finches.
*Yellowish Finches.
Gold-fronted Finches.
*Silky Cowbirds.
Waxwings.
Red-Mountain Doves.
*Blue Robins.
*Argoondah Quail.
Mealy Redpolls.
Lesser Redpolls.
*Pied Wagtails.
*Red-headed × Ribbon Finches.
Jackson's Whydahs.

*Been out all winter.

Also a Lesser Sulphur-breasted Toucan and Sundry Waxbills, Weavers, Buntings, and other "Freely Imported Species." The writer has to bewail the loss of Plumbeous Redstart and Blue Robin hens, due to the abnormal ardour of their mates. If more is to be said about the above, some other pen must tell the story.

Dr. Easton Scott's Aviaries: I cannot do justice to those aviaries in the space at my disposal, and I hope at some near date to figure them with photos and ground plans. The main aviary is on the lawn, a large enclosure some 60 × 36 feet, with a shelter about 18 × 12 feet (these are approximate measurements and probably underestimated), the flight is laid out as a garden, with a shrubbery all round, then a gravel walk, the centre patch being a grass-plot with a small fountain and pool in the centre; the internal standards are adorned with roses, hops, and other climbers—the whole effect being most picturesque and pleasing. On previous occasions I have sat on the centre grass-plot with Dr. and Mrs. Scott and watched the birds disporting around us, without disturbing them in the least or preventing them visiting and feeding their families. In this aviary have been bred and reared to maturity Blue (*Tanagra episcopus*) and Scarlet (*Rhamphocoelus brasilius*) Tanagers, the only ones of their kind bred in Great Britain. At the time of our visit (April 8th) the Scarlet Tanagers already had a beautifully constructed, cup-shaped nest, in the fork of a laurel bush and were busily engaged in the duties of incubation. Here also are annually reared Gouldian and other Grassfinches, and on more than one occasion success has been all but obtained with Violet-eared Waxbills and Rufous-throated Blue Sugarbirds. Full reference, however, can only be made in an article devoted to these aviaries alone and well illustrated. The other aviaries are, a smallish one as winter quarters for the birds given protection, and this winter most of the Grass-finches, Waxbills, etc., have been housed therein. There is also a large aviary, somewhat shaded by overhanging trees, over 70 feet long, and lofty, it has a moveable partition, enabling it to be used as two aviaries, each with a shelter.

Here were to be seen all the "Freely Imported Species," and many rare and uncommon species also I will only partially enumerate them.

Violet-eared Waxbills.
Black-cheeked Waxbills.
Gold-breasted Waxbills.
Grey Waxbills.
St Helena Waxbills.
Orange-cheeked Waxbills.
Firefinches.
Cordon Bleus.
Indigo Buntings.
Red-headed Buntings.
Black-headed Buntings.
Nonpariel Buntings.
Scarlet Tanagers.
Blue Tanagers.
Pretre's Tanagers.
Superb Tanagers.
Grey-winged Ouzels.
Green Cardinals.
Gouldian Finches.
Pectoral Finches.
Chestnut Finches..
Bicheno's Finches.
Cuban Finches.
Zebra Finches.
Himalayan Greenfinches.
Tri-colour Mannikins.
Bronze Mannikins.
White-headed Mannikins.
Black-headed Siskin.
Parson Finches.
Long-tailed Grassfinches.
Masked Grassfinches.

There are many others, but the above will indicate the representative character of Dr. Scott's collection. The bulk of the species have successfully reared young at various periods, but like most other aviaries success varies and one has to take the bad with the good as one would imagine such equipment keeps the death-rate very low. With this very inadequate notice I must pass on to the next visited.

Mr. Warren Williams' Aviary: This aviary is long and narrow, neatly and tastefully built, with a cosy shelter; it faces south, at the back is a wall, half the width of the entire length of roof of flight is covered in, and the birds, are quite snug even during severe weather. It was planted with privet and various evergreens. Our visit here was a very short one and the dusk of evening too, was already making itself felt. Most of the birds had retired, so had to be disturbed for our benefit, and, of course, under such conditions one could not see them at their best—there was quite a crowd of Waxbills and the "Small Ornamental Finches," all in such condition as would do credit to any aviary, bespeaking intelligent care and treatment, and also a personal interest in their general welfare on the part of their owner. I have never seen birds in better condition, not even on the show-bench -yet they dwell in their out-door quarters all the year round and this suited them admirably, as their excellent and robust condition amply demonstrated. Unfortunately I took no list here and I have delayed writing for one till too late, but, I hope Mr. Warren-Williams will send a photo and description of his aviary and its occupants to appear in a later issue. He is to be congratulated on a pleasing and well planned aviary, enhanced by the setting of a beautiful garden, and a series of the "Small Ornamental Finches" to grace and "people" it with life and beauty. Breeding results, during the three years it has been up, have been quite up to the average, and his interest in them was only too apparent as we gossiped of their doings.

MAJOR HORSBRUGH'S AVIARIES AND WATERFOWL: Our visit here was the opening one on Good Friday, and we were favoured with beautiful weather, making our wanderings round the lakes and grounds of Tandridge Priory a delightful one. We were fortunate too to get a glimpse of the Kingfisher, which nests on the banks of one of the lakes and the nest hole was pointed out, which led to the chamber in which a brood was being reared. The aviaries here have only just been finished and are as yet neither fully furnished nor stocked. A long greenhouse forms the shelter, the roof being fitted with blinds to keep off extreme heat, and a fully adequate hot-water service will provide against winter's cold. The greenhouse has been divided up into several divisions, each with a separate out-door flight, the last of which is really large, lofty, and well sheltered, and should provide ample accommodation for a fairly large mixed collection of birds, at present only the nucleus of the collection is there —one or two of the enclosures are specially for the reception of the various consignments, which reach Major Horsbrugh from time to time, and in consequence the occupants of these will be continually changing.

In a conservatory we noticed a very fine specimen of the rare Sharpe's Wood Owl (*Syrnium nuchale*), which was finger tame, in fact so tame that strangers could handle it with impunity, and it delighted in having its poll and chin scratched, purring with delight the while; it was a most fascinating pet and though Owls have never attracted me to the extent of keeping them, yet I rather envied its owner the possession of so charming a bird.

In one of the enclosures were a pair of the rare Yucatan Jays (*Cissolopha yucatanica*), both still in immature plumage, and uncannily tame I almost fear I am committed for some of this group as soon as I can arrange accommodation.

The other birds we noted were: a fine Senegal Parrot, an exquisite pair of Blue Robins and some Troupials.

In the lovely grounds surrounding the house are three lakes, most picturesquely placed against a background of rhododendron coverts and a thick wood. These were approximately of about one-and-a-half, three-quarters, and half acre extent respectively, and on them disported the following Waterfowl:—

Coreopsis and Ruddy-headed Geese.
Common, and Ruddy Sheldrakes.
Bewick's Swans.
Surface-feeding Ducks: Shoveller, Mallard, Pin-tail, Bahama, Pin-tail, Mandarin, Carolina, Wigeon, American Wigeon, and Chiloe Wigeon.
Teal. Chestnut-breasted, Ringed, Falcated, Baikal, Common, Garganey, American, Blue-winged, and Chilian.
Diving Ducks: American Ringed (*Fuligula collaris*), American Lesser Scaup (*Fuligula affinis*), Common Scaup, Tufted, and Common, Rosy-billed, and Red-crested Pochard.

Time passed all too quickly and we reluctantly had to decline an invitation to lunch and proceed on our way.

MR. SCOTT FREELAND'S AVIARIES: I am not going to describe these, as not only have they already been referred to in our Journal, but Mr. Freeland has kindly consented to describe their construction, their occupants and results in a near issue of "Bird Notes." In consequence I made no list of their occupants, the bulk of which have been shut in the shelters during the winter months -all of them looking in the best of condition, in fact the plumage of most of them was in exhibition trim. Among others we noted the following:

Silver-eared Mesia.
Pekin Robin.
Virginian Cardinal.
Yellow-wing Sugar-birds.
Purple Sugar-birds.
Blue Sugar-birds.

Shama.
Grassfinches (various).
Weavers (various).
Nonpareil Buntings.
Rainbow Buntings.
Indigo Buntings.
Mannikins (various).
Cordon Bleus.
Gold-fronted Fruitsuckers.
Orange-headed Ground Thrushes.
Superb Tanagers.
Tri-colour Tanagers.
Scarlet Tanagers.
Blue Tanagers.
Waxbills (various).
Cuban Finches.
Lavender Finches.
Whydahs.

Again we fain would have lingered, but time pressed and we reluctantly said good-bye and left for East Hoathly, where again we were met by a warm welcome from our host, Dr. Lovell-Keays, and his almost bewildering array of foreign birds; but, this I must leave for another instalment. I can only hope that interest will be as sustained in reading the account, as ours was in observing and noting. Then these notes will serve some practical purpose and not have been penned in vain.

To be continued.

Birds of the Jhelum District.

By H. Whistler, I.P., M.B.O.U.

(*Continued from page* 136).

March 1.—Travelled 40 miles by Tonga from Jatli to Dumman over the high table land which averages some 1,500 feet above sea level. The chief features in the way of birds were a number of Chats, chiefly White-capped Chat (*Saxicola capistrata*) and Strickland's Chat (*S. opistholeuca*), and a few Desert Chats (*S. deserti*) and Pied Chats (*S. picata*); the Indian Grey Shrike (*Lanius lahtora*) was very much in evidence; many Pipits and flocks of Short-toed Larks and Skylarks were common in the fields along the road.

Signs of the spring migrations were seen in various flights of duck and a few Ruddy Sheldrakes, which were visiting the village ponds, and in one place a couple of Pintail and a spring of Teal were found in a flooded wheat-field by the side of the road. Although I have travelled this road over a dozen times before, this is the first occasion on which Duck have been noted.

Several Striated Swallows (sp.?), a Wryneck (*Iynx torquilla*), and a number of European Hoopoes (*Upupa epops*) were also migrants.

A nest of the Indian Tawny Eagle (*Aquila vindhiana*) containing a single egg was found on the extreme top of a large Shisham tree standing in broken ground near the road. When flushed the bird merely flew to the top of a neighbouring tree and sat there taking no notice of the man who climbed up to the nest.

March 2.—Camp at Dumman. Made the acquaintance for the first time of the Eastern Linnet (*Acanthis cannabina fringillirostris*) which differs from the English race chiefly in the tint of red on the forehead and breast which are in the Eastern bird of a pomegranate red. It was common enough, occurring in small flocks and in parties of two or three individuals. These would often be noted, flying overhead, attention being called by their twittering note, or settling at the tops of Shisham and Kikur trees. I do not remember seeing any on the ground. In the early mornings the males were singing freely at the tops of trees around the Rest House. The species was noted about for the greater part of my tour, but apparently became scarcer towards the end. It is, of course, only a winter visitor in these parts.

A Blue-rock Thrush (*Petrophila cyanus*) noted, also a Black-winged Kite (*Elanus caeruleus*) the first of the species that I have seen in this district, although it is said to be fairly common in Kohat district, and I found it on several occasions in Ferozepore district further south.

March 3. Camp Dumman. Met with a small party of Little Green Bee-Eaters (*Merops viridis*)—the first of the numbers that will spread over the country—in a few days they had become general. This species is a summer visitor only in these parts, and immensely common, being one of the familiar birds known to everyone: it continues common until the end of September, and then departs, all being gone by the middle of the month.

The country round here is almost entirely broken up into cliffs and ravines of hard earth, hollowed out by the action of rain and sun into all sorts of subterranean cracks and crevices. These afford homes to numbers of Blue Rock Doves (*Columba intermedia*) which breed in the cracks—hence it is no unusual thing to be startled by the hasty and noisy exit of a pair of the pigeons from the ground almost by one's feet.

A Pine Bunting (*Emberiza leucocephala*) and a Wall Creeper noted.

March 4.—Camp Dumman. The Indian Swift (*Cypselus affinis*) is common here at present and commencing to nest in the bungalow verandah. This species is smaller than the English bird, and marked with a conspicuous white bar across the rump and lower bank. They have much the same noisy cry uttered in flight; and were occasionally very noisy in the evening in their nests. They form one of the typical features of the Punjab villages nesting in the roofs of the houses and hawking about in swarms in the immediate vicinity—a village is very rich in insect life of every description! The nests are of various shapes and sizes, from a mere pad in a hole to a large hemispherical structure with an entrance funnel attached to the under-surface of a beam of rock, made of a miscellaneous assortment of feathers and straws stuck together with saliva. On occasion I have found an old nest of a Striated Swallow utilised by a pair of this species—a similar occurrence was doubtless responsible for the statement that the Indian Swift built a mud nest. The eggs are of course white, of the typical cypseline type. In these parts I have noted them about in every month of the year except December and January; they are, however, scarcer in October and November, and but few appear in February.

March 5.—From Dumman to Chakwal, finding on the way one egg in a nest of *Aquila vindhiana*, situated in a side fork of a very tall Shisham Tree, I flushed the bird with difficulty, and she at once settled some 50 yards away on the next tree, allowing me to ride up under the tree and scrutinise her with my glasses, to observe the ear-shaped nostril. Also found two new nests of the Indian Grey Shrike *Lanius lahtora* in thorn trees.

In the evening at Chakwal there were a large number of Tufted Duck with a few Common Pochards on the village tank.

March 6.—In a small marshy valley I found some seven or eight Ruffs and Reeves feeding: they were rather shy but I managed to bag one and found the carcase good eating after I had skinned the bird for my collection. These birds were on migration and I have not met them before in the district. On the same ground were a couple of Snipe, a few Lapwings, and several Red-wattled Lapwings (*Sarcogrammus indicus*); as well as one or two of those lovely birds, the Yellow-headed Wagtail (*Motacilla citreola*). This Wagtail is essentially a marsh bird, and is found commonly whereever a pond or stream is bordered with rushes or grass; it is also found feeding on grass-lands by the rivers'banks. This race, as well as Hodgson's Yellow-headed Wagtail (*M. citreoloides*), is in these parts a spring visitor only, occurring commonly in March, April, and May, I can imagine no more charming birds for anyone with a large well-watered aviary, but there would probably be some difficulty in securing live birds.

A Kestrel, Lugger Falcon, and two Striated Swallows (species ?) seen.

March 7.—Returned to Dumman. The common Woodpecker of these parts is the Sindh Pied Woodpecker (*Dendrocopus sindhianus*) which to the casual observer would seem very like our English Greater Spotted Woodpecker. It is interesting to note that the Salt Range which divides the district roughly into two parts—the high Chakwal plateau about 1,500 feet above sea level, and the lower Jhelum plains 700-800 feet in elevation—forms the border between two common species of Woodpecker; the Sindh Pied Woodpecker occurring in the Salt Range and the Chakwal area, and the Golden-backed Woodpecker (*Brachypternus aurantius*) occurring on the low ground; this being its extreme limit for the north-western Punjab.

March 8.—Dumman. While returning from visiting the scene of a dacoity. I saw a dark lump high up on a sandstone cliff by a narrow stream bed that I was approaching. Thinking it might possibly prove to be a nest I kept my eye on it, and sure enough when I approached fairly close a Raven slipped off and flew up to settle on the top of the cliff. This made me turn out of the path to examine the place more closely and it then became clear that the lump indeed was a nest. The site was on the face of the cliff near the top, but the only method of approach without ropes was certainly from the base. The man with me, an active Masalli, said he was willing to essay the climb, and he scaled half the distance easily enough up the fallen debris at the foot of the cliff. The first Raven had disappeared, and as the man had started to climb a second Raven had left the nest and settled on a rock near by, where it was croaking and puffing up its feathers in a most amusing way.

When the man reached the difficult part of the climb, where foothold had to be cleared on lumps and ledges of the soft sandstone, both Ravens (the first had returned) seemed to consider that the matter was becoming serious, and started flying about, croaking and making most realistic stoops which caused the man to duck and try to scare them off; indeed had they gone for him in earnest it would have been a serious matter, as his foothold was precarious, and I was some small distance away with a couple of fidgetty horses.

However, the Ravens soon retired to a rock at the top of a cliff on the other side of the stream and stayed there, discussing the situation, until the downward climb had commenced. The last portion of the climb was very difficult, but the man reached the nest and shouted that there were three eggs, which I told him to take. The descent was more hazardous than the ascent, and for part of the way the eggs had to be lowered in stages, tied in one end of the man's long turban—a process which caused a large dent in one egg. But after a great deal of trouble man and eggs duly reached the bottom, and the Raven returned and sat in her empty nest.

A number of Harriers were flying about over the wheat fields, busy quartering the ground for quarry; on one occasion there were four in sight at once. I could not ascertain the species, but as they were about still on 10th March and then disappeared (without any change in the local conditions) I conclude they were passing through on migration.

A Black Stork (*Ciconia nigra*) and a Rufous-backed Shrike (*Lanius erythronotus*) seen.

March 10.—A Wall-Creeper (*Tichodroma muraria*) noted.

Moved to camp at Miswal where I found a spring of about a dozen Teal frequenting some patches of flooded wheat about a hundred yards from my tent. They were at the same spot morning and evening for the next two days, but their numbers were rather reduced in the end—a welcome change to the ordinary camp fare!

March 11.—Camp at Miswal. In the early morning a large flock of Plover passed overhead and settled in the distance; and in the evening they again passed over—these were almost certainly Sociable Lapwings (*Chettusia gregaria*) on migration. On my return to Jhelum I noted a small trip on 17th March in which the males were black-breasted, *i.e.*, in full plumage, and my men then told me that they had been about for some days during my absence from headquarters.

March 12.—Found another pair of Ravens nesting in hollow on the face of a steep cliff, the nest was probably empty, as they were still carrying sticks up to it.

In the sandy stream beds and nullahs which intersect the country round about Dumman I have noted several pairs of the Little Ring Plover (*Ægialitis dubia*), which by their behaviour evidently intend to nest.

In the evening a Little Owl (*Athene brama*) was hunting near my tent, often hovering over the growing wheat in a very Kestrel-like manner.

March 13.—A Wall-Creeper (*Tichodroma muraria*) met with in a bare nullah. It had almost completed the moult into summer plumage *i.e.*, the throat and breast were black, and the crown grey. A Blue-throat seen.

March 14.—Marched from Dumman to Chak Chakora. The Chats which have been such a feature of these parts have practically all departed, only a few Desert Chats (*Saxicola deserti*) being still about. The Eastern Meadow Bunting is still about. Three Stilts (*Himanthopus candidus*) noted in a wayside pond where also was a large spring of Teal. A Bluethroat seen. A fair number of Brown Rock Pipits (*Anthus similis*) about—probably on migration.

March 15.—Marched into Sohawa and on the road saw a party of nine or ten Alpine Swifts (*Cypselus melba*) which were flying north at a tremendous pace low over the ground. These fine Swifts pass through Rawal Pindi and Jhelum districts on both the spring and autumn migrations. Their periods would seem to be fairly regular as I noted them on March 20th and 22nd at Rawal Pindi in 1911. The autumn migration lasts from the end of July till the second week of September.

March 16.—Sohawa. Visited the Jheel where there was a number of Tufted Ducks, White-eyed Pochards, Pochard, and perhaps also Gadwell; also a Shoveller or two. I also saw a single Pond Heron (*Ardeola grayi*) which although common everywhere at every season further south in the Punjab, is here almost entirely wanting in winter, but a very numerous nesting species.

Returned to Jhelum to find that the Purple Honeysucker (*Arachnecthra asiatica*) has arrived in my absence, and is now most extraordinarily numerous, their loud notes being heard on every hand. The lime and orange trees are now in blossom and the Honeysuckers as well as White-eyes (*Zosterops palpebrosa*) are to be seen feeding at the flowers, from which they doubtless extract both nectar and insects. They perch to feed, instead of hovering like Humming Birds. They can on occasion hover for a short time, but do not seem to do so for feeding purposes.

March 18.—An oppresive day, heavy, with dust storms, followed by rain and hail at night. Many signs of migration. A number of Wagtails *Motacilla alba, M. personata, M. beema, M., citreola,* seen battling with the wind and settling up beyond the rak; numbers of Red-spotted Blue-throats in a tamarisk thicket by the river, a large flight of Swallows (*Hirundo rustica*) about, accompanied by Pale Sand Martins (*Cotile riparia diluta*) and what were probably Cliff Swallows (*Hirundo fluvicola*). A Gull-billed Tern (*Sterna anglica*) seen.

The first Crested Honey Buzzard (*Pernis cristatus*) of the season noted. During my absence the Little Indian Pratincoles (*Glareola lactea*) have arrived and are now extraordinarily numerous on the river.

At night a Siberian Chiff-chaff (*Phylloscopus tris-*

tis) took refuge from the hail in one of my servant's quarters; the species is numerous now.

March 19.—Floods out over the golf course after the rain attracted a party of some twenty Ruffs and Reeves; these birds were passing through on migration and I saw them about until the 24th, when I secured a couple whose crops and gullet were full of fine grass seeds—surely rather unusual food for this species?

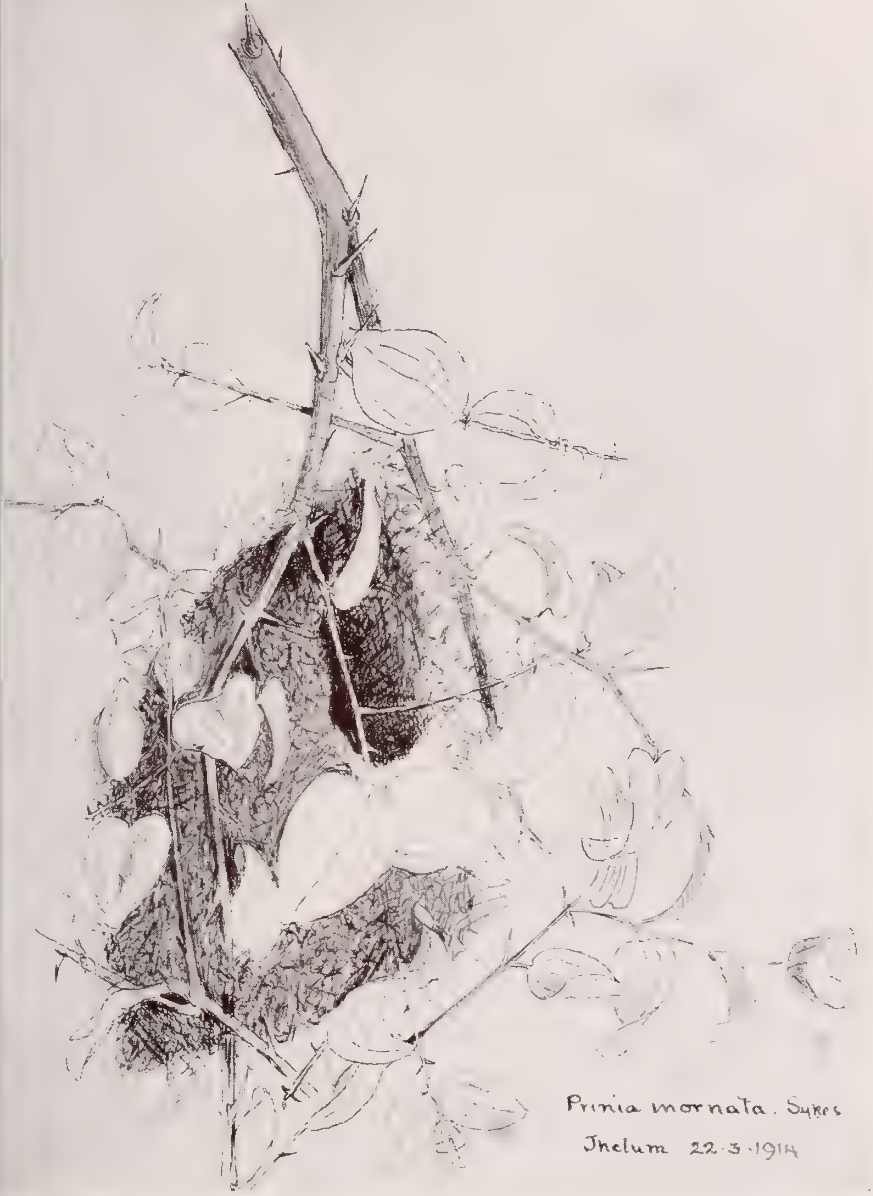
March 20.—The floods have subsided again, leaving the sandbanks covered with a coating of fine wet mud—an ideal feeding place for the waders; but the smaller species are rather inconvenienced by the fact that their short legs become very clogged by the mud which is a little too watery still for their comfort. The migration of waders is evidently in full swing as there are many Redshanks, Kentish Plovers, Stints, and Greenshanks. There is no apparent increase in the numbers of Green and Common Sandpipers, but perhaps a slight decrease of the last named. A number of Black-headed Gulls (*Larus ridibundus*) have arrived on migration—all have the black bar on the tail indicative of immaturity. The first Indian Skimmer (*Rhynchops albicollis*), Red Turtle Dove (*Œnopopelia tranquebarica*) and White-eyed Buzzard (*Butastur teesa*) of the season noted. A Reed Warbler (*Acrocephalus dumetorum?*). A single Kingfisher (*Alcedo ispida bengalensis*).

March 21.—A nest with four eggs of the Indian Wren-Warbler (*Prinia inornata*) about three feet from the ground in a thorn bush by the bungalow. The nest, which is represented in the accompanying sketch, was composed of very fine strips of green grass or possibly wheat, woven into a network resembling but not so compact or strong as that of Weaver bird's nests. No lining, and for the purpose of the drawing, many of the leaves round the nest have been removed The eggs are white with a very faint pinkish tinge, boldly blotched with chocolate and pale reddish-brown; these markings showing a tendency to zone at the broad ends; a few hairlines of the same colours at the broad ends, mostly within the zone area. The normal ground colour of the eggs of this species is blue and this white type is so rare that Hume stated he had only seen six specimens amongst as many hundreds.

A small party of Rose Finches or Scarlet Grosbeaks (*Carpodacus erythrinus*) noted—the first of the numbers which will pass through on migration. This species appears about the time the mulberries ripen (they are still green) and is, I believe, known as the Mulberry Bird.

A single Spotted Dove (*Turtur suratensis*) noted.

March 22.—Spent the day on the river. A very great decrease in



Prinia inornata. Sykes
Jhelum 22.3.1914

Nest of Indian Wren-Warbler.

the number of Ducks, as practically all the Mallard have gone, only two or three being seen in place of the numbers noted last month. A few Teal and a fair number of Pintail, but the majority of the duck I failed to identify, they were perhaps Gadwall. Almost all the Ruddy Sheldrakes have gone—a single party of six or seven only only being seen. A small gaggle of Geese contained Grey Lags and Bare-headed Geese.

The Lapwings have all gone, and their place has been amply filled by the Red-wattled Lapwings (*Sarcogrammus indicus*) which are now so numerous that a pair is to be met with every hundred yards down the river—a marked contrast to last month, when a single bird was something to chronicle

Many Black-headed Gulls and some *parties* of Greenshanks on migration. A few Egrets about probably *Herodias garzetta*. On one of the islands a few River Terns and Black-bellied Terns had started nesting operations——most of the nest hollows were empty but I found two odd eggs of the former, and a clutch of three eggs and a single egg of the latter.

A King Vulture was seen busily engaged at some object at the edge of the water, while several Egyptian Vultures were waiting their turn. Curiosity led me to investigate and the booty proved to be the carcase of a large Turtle—the Vulture had not made much impression on it.

A large flight of about a hundred Rooks noted.

March 22.—A Black Vulture (*Vultur monachus*) flew over my compound.

Eggs in a nest of the Red-headed Merlin (*Falco aesalon*).

March 25.—Three Pallas' Fishing Eagles circling high in the air over Civil Lines. A fine immature tiercel Peregrine was noted feeding on a freshly killed Reeve—it was very bold and did not in the least object to my watching the feast from a distance of some 50 yards.

At the point saw a party of five White-cheeked Bulbuls (*Molpastes leucogenys*) which were clearly on migration. They kept on flying up into the air calling and hovering as if trying to make up their minds to start off again. Other migrants at the same place were a pair of Ashy-crowned Finch-larks (*Pyrrhulauda grisea*) and a small party of Tree Pipits. Numbers of Jungle Mynahs (*Æthiopsar fuscus*) noted going to roost in the Rak.

A fine Sparrowhawk and perhaps a Night-Heron seen.

March 26.—Visited a sandbank where numbers of *Glareola lactea* have prepared their nest hollows, but there are no eggs as yet.

Near by were several Kentish Plover and Little Ring Plover —the last named perhaps going to nest.

The Indian Sandlark (*Alaudula adamsi*) was found to be paired and preparing to nest. The males were singing on the sand and one was heard several times to introduce most true imitations of the alarm notes of the Green Sandpiper and Red-wattled Lapwing into his song—the latter imitation was indeed excellent.

Four Black-headed Gulls seen. The last Himalayan Tree-Creeper noted.

March 27.—Female Grey-winged Ouzel seen in the morning as well as two Bank Mynahs.

Saw three birds in the Rak which were undoubtedly Turkestan Pendulum Tits (*Anthoscopus coronatus*) which have previously only been noted from Sindh and Kohat District within Indian limits. I had no gun with me, but their appearance is sufficiently distinctive to allow of easy identification.

A Black-winged Kite seen; it was attempting to hunt over a tamarisk patch, hovering like a Kestrel, but the Crows drove it away.

Stone-Plover (*Esacus recurvirostris*) noted for first time this year.

The following nests seen: Little Brown Dove (*Turtur cambiensis*) 72; Grey Shrike (*Lanius lahtora*) 74; Jungle Babbler (*Crateropus canorus*) 1 egg.

March 28.—A pair of White-eyed Buzzards courting by the house, calling loudly "pitweer—pitweer," and chasing each other about.

A fine male Sparrowhawk seen in the Rak.

March 29.—A pair of Purple Sunbirds are building a nest in a bush in my compound; the female does all the work, while the male disports himself in the neighbourhood, chasing other birds that come by; he occasionally visits the nest, but apparently to observe progress rather than to help. I notice every year now these birds nest almost immediately after their arrival.

Two Bank Mynahs seen.

March 30.—A big flight of Ashy-crowned Finch-larks, consisting of both males and females seen flying over the point the pair were noted a day or two ago. These were undoubtedly on migration as the species was only noted previously in the Salt Range (3,000 feet; breeding) and in the plains at Lilla—both at the other end of the district.

A single Crane (*Grus communis*) noted on the Sandbanks.

March 31.—Examined a nest-hole of the Alexandrine Parrakeet (*Palacornis nipalensis*) from which the hen bird emerged; but it was empty, and I learnt that young had been taken from it two days previously by some boys. It is curious to note, that although the species is breeding now, there is a large flock of some hundred and more individuals, which is to be noted flying about near the Rak in the evenings.

RESUMÉ OF THE MONTH.

March has proved a very interesting month owing to the amount of migration which has been going on—the spring migrations which were noted as beginning to commence last month being now fairly under way.

First of all we may note that the majority of the winter visitors have departed—some species in their entirety, e.g., *Saxicola capistrata, Acanthis fringillirostris,* while others have partly gone, leaving a small proportion of their numbers to follow in the first half of April, e.g., *Merula atrigularis, Pericrocotus peregrinus, Hypsipetes psaroides.* A few winter visitors, such as *Phylloscopus tristis* and *Ruticilla rufiventris,* have remained in full force throughout the month.

Then there has been a great influx of summer visitors which may be divided under two heads, firstly those species which leave a small proportion of their numbers here throughout the winter; of this class *Sarcogrammus indicus, Lanius vittatus,* and *Coracias affinis,* may be cited as examples. The second class consists of species like *Arachnecthra asiatica, Merops viridis, Œnopopelia tranquebarica, Butastur teesa,* etc., which entirely depart during the winter.

Lastly there has been the arrival of the spring passage migrants which fall under the same divisions as the summer residents: namely those species, such as *Siphia parva, Hirundo rustica,* and *Luscinia suecica,* which leave a small number of individuals behind at the autumn passage to stay the winter; and secondly those species which are passage migrants pure and simple, not found after the passing of the autumn migration; for examples we may take *Anthus trivialis, Larus ridibundus, Carpodacus erythrinus,* and *Motacilla flava* (various races).

A few species have commenced to nest, as noted under the various dates.

ERRATA.

Jan. 2.—"1,000 feet" should be 10,000 feet.

Jan. 9.—"Shakin" should be *Shahin.*

Jan. 12.—Under remarks on the Wall Creeper delete "*north-west of here.*"

Plate. Adult Peregrine Falcon is *F. peregrinus,* not *F. peregrinator.*

Jan. 17.—"*ferax*" should be *ferox.*

Jan. 24.—"*galgula*" should be *gulgula.*

A Sex Distinction in Rosella Parrakeets.

(*Platycercus eximius*).

BY DR. L. LOVELL-KEAYS.

So much has been written on the green spot in the hen Red Rosella and such heart-burning caused that one began to wish there never had been a green spot. It seems they do not worry about the green spot in Australia, but turn up the wing, when the difference between the sexes is so apparent that we can sex them in an instant. Briefly the primaries of the *hen* bird are barred with a white bar on the under surface, whereas the cock has not a vestige of this barring. I learnt this about a month ago at Gamage's, and so far the test has proved absolutely infallible and I have examined all the Rosellas I could get access to. I wonder if Abrahams would have rejoiced to see this day. I believe he was the originator of the great green spot, which has been so religiously handed down to posterity, that we shall be sorry to lose an old landmark.

◆

Editorial

HUMMING BIRDS: In our brief notice of the successful bringing over of three species of Hummers, owing to proofs having to be passed while the Editor was on tour; two errors in the generic name crept in, arising, probably, from bad writing—the genus of the Ruby-throated and Smaller Emerald Humming-birds is *Eulampis* and not "*Sulampis*" as printed. We have heard further of these birds, and their owner writes:

"All the Hummers are doing well so far, the tiny "little *Bellona exilis* one of the smallest birds in existence "has grown a lovely new tail and I fancy one may take it "as a sign that the food agrees with these birds. They all "love to bathe in wet flowers and foliage, but, so far, do not care "for the flowers as food much, and very few go for insects "at all, even the green fly does not attract them, at least "up to now. Their flight is wonderful—they seem to perform "veritable feats in the air, sometimes dancing like gnats on "a hot summer's night, sometimes flying backwards with tail "jerked under the body and always spread fanwise, or even "sideways in crab-position; looking more like insects than "birds. Indeed, what I once read of them is quite true: "'Sitting, they are birds; flying they are insects.'"

So far, the writer of the above has found the Hummers fully as robust as, if not more so, than the African Sunbirds, and up to the present (about 7 weeks) they are doing well, and are better in every way than when brought ashore.

Nesting Notes: Once more we are, practically in the midst of another season, with hope and expectation running high to what extent will it be realised ? ? The very uncertainty, irritating though it proves at times, constitutes one of the greatest charms of aviculture. We talk glibly of luck at times, and hope it will come our way; of course it all depends in what sense we use the word, but the aviculturist who waits for luck, will, I guess, a few years hence *be waiting still!* While the one who plans as if *luck* did not exist, and seconds what luck, in the shape of favourable weather, etc., comes his way by intelligent co-operation, will, though he may pass through many disappointing experiences certainly achieve ultimate success in the sought for channel.

Things are already beginning to move, as the following brief notes from various members will indicate:

Mr. R. Suggitt.

Young Birds.—Grey-winged Ouzels and Red Ground Doves.

Building.—Guans.

Mr. H. Bright.

Building.—Himalayan Greenfinches and Pink-browed Rosefinches, also Grassfinches, and Euler's Finches.

Incubating.—Australian Crested Doves, and Melba Finches; as regards the latter he relates quite an interesting episode as follows :—

"A curious instance of what birds will do when they want to "breed has just occurred in my bird-room. There is no nesting "material of any sort left about so as to discourage, as far as pos-"sible, egg laying during cold weather; but, the Melba Finches have "used two pieces of sandstone on the floor, the edges of which formed "a kind of domed cavity, as a nesting site, and have deposited three "eggs on the floor, which they are closely incubating. The nest con-"sists literally of three or four small feathers and the rest sand and "sandstone. Previously they have always chosen a bush, but of course "they have had material to build with."

Dr. Lovell-Keays.

Young.—Zebra and Parson Finches.

Incubating. Mexican Rosefinches; Melba, Jacarini, Diamond, Parson, and Zebra Finches, Long-tailed and Masked-Grass Finches; also Pintailed Parrot Finches, and Sydney Waxbills.

Building.—Red-crested Cardinals; Blue Sugarbirds; Pectoral, Alario, and Scaly-crowned Finches; Blue-breasted Waxbills and Cordon Bleus.

Mr. W. A. Bainbridge.

Young.—Zebra Finches and Mannikin Hybrids.

Incubating.—Diamond Doves, cross-mated Tri-colour Mannikin × Bengalese, and Jacarini and Zebra Finches.

Building. Various Grassfinches, Grey Singingfinches, and Bengalese.

Rare Arrivals: On April 24th, a consignment of Indian Seed-eaters, ex Mr. K. A. Appleby, were deposited with the Editor for disposal. These consist of Gold-fronted Finches (*Metaponia pusilla*), new to aviculture, one only Rosy-winged Afgan Finch, also new, Hair-crested Buntings, Giant Baya Weavers, Calandra Larks (*Melanocorypha bimaculata*); Bustard Button, Little Button, Bush and Jungle Bush Quail. A consignment also reached the Editor, ex Mr. E. W. Harper, under similar conditions, among which are a true pair of Jackson's Whydahs and several males, also one odd male Crimson-ringed Whydah (*P. laticauda*) and other rare Weavers and Finches, most of which were not yet identified at time of going to press.

Erratum: Page 107, line 18, for "lines" read *hues*.

◆

Correspondence.

AN UNUSUAL NESTING SITE.

Sir,—A pair of Grey Java Sparrows built a nest in an old tin kettle hanging in the aviary, and, deposited three eggs therein, duly hatching out all three. The young have just flown.

I see from the books that it is not common for the Greys to rear young, but that the method to secure a free breeding strain is to cross them with the white variety. There are no White ones in the aviary and I am pleased they have done so well.

The Javas are along with my Budgerigars, Canaries, and all my small Foreign Finches.

(Mrs.) ALINE BONNICK.

◆

British Bird Calendar.

Brief notes on Migration Movements, rare visitants, uncommon nesting occurrences and general field notes for this calendar should reach the Hon. Editor not later than the 28th of each month. The co-operation of all is solicited.

ARRIVAL OF MIGRANTS: Hereunder are the earliest dates I have recorded this spring, either at Hazeleigh or the adjoining parish of Danbury.

April 4.—Swallows (pair), Danbury.
,, 10.—Nightingale, Hazeleigh.
,, 10.—Cuckoo, Danbury.
,, 12.—Tree Pipit, Hazeleigh.
,, 14.—Chiff-chaff, Hazeleigh.
,, 14.—Blackcap, Danbury.
,, 15.—Swallows (pair), Hazeleigh.
,, 19. Cuckoo, Hazeleigh.

I have personal records of the Swallow for 25 years and find the previous records for the Nightingale, April, 12th, 1901, at Hazeleigh is the earliest; April 14th, 1904, at Hazeleigh is the previous earliest for the Cuckoo.

That this is an exceptionally early spring may also be gathered from the fact that I first saw an Orange-tip Butterfly yesterday, April 20th, and on reference to my diary I find that I have records for 34 years (unfortunately not quite consecutive) and only six of these are in April, the earliest being 7th April, 1871, near Sevenoaks.

G. H. R., Hazeleigh, 21/4/'14.

April 12.—Swallow, Ipswich.
,, 16.—Wryneck, Ipswich.
,, 19.—Lesser-Whitethroat and Willow Warbler, Ipswich.
,, 22.—Blackcap, Ipswich.
,, 24.—Garden Warbler, Ipswich.
,, 25.—Nightingale, Ipswich.

B. H. S., Ipswich, 27/4/'14.

April 12.—One Swallow seen on Southsea Common about 12-30 p.m. The date last year was 20th April.
,, 20.—Cuckoo heard and two Whitethroats seen on Portsdown Hills

D. E. P., Southsea, 12/4/'14.

April 12.—Saw flock of hundreds of Swallows, which swooped down here (Harrogate), one was pure white.

,, 21.—Saw and heard Cuckoo.

,, 26.—Saw in Ripley Woods a fairly large bird, mostly yellow with blackish head, apparently an Oriole; also a black and white Woodpecker, and two Kingfishers.

B. H., Harrogate, 27/4/'14.

NOTES FROM NORTH UNST LIGHTHOUSE.

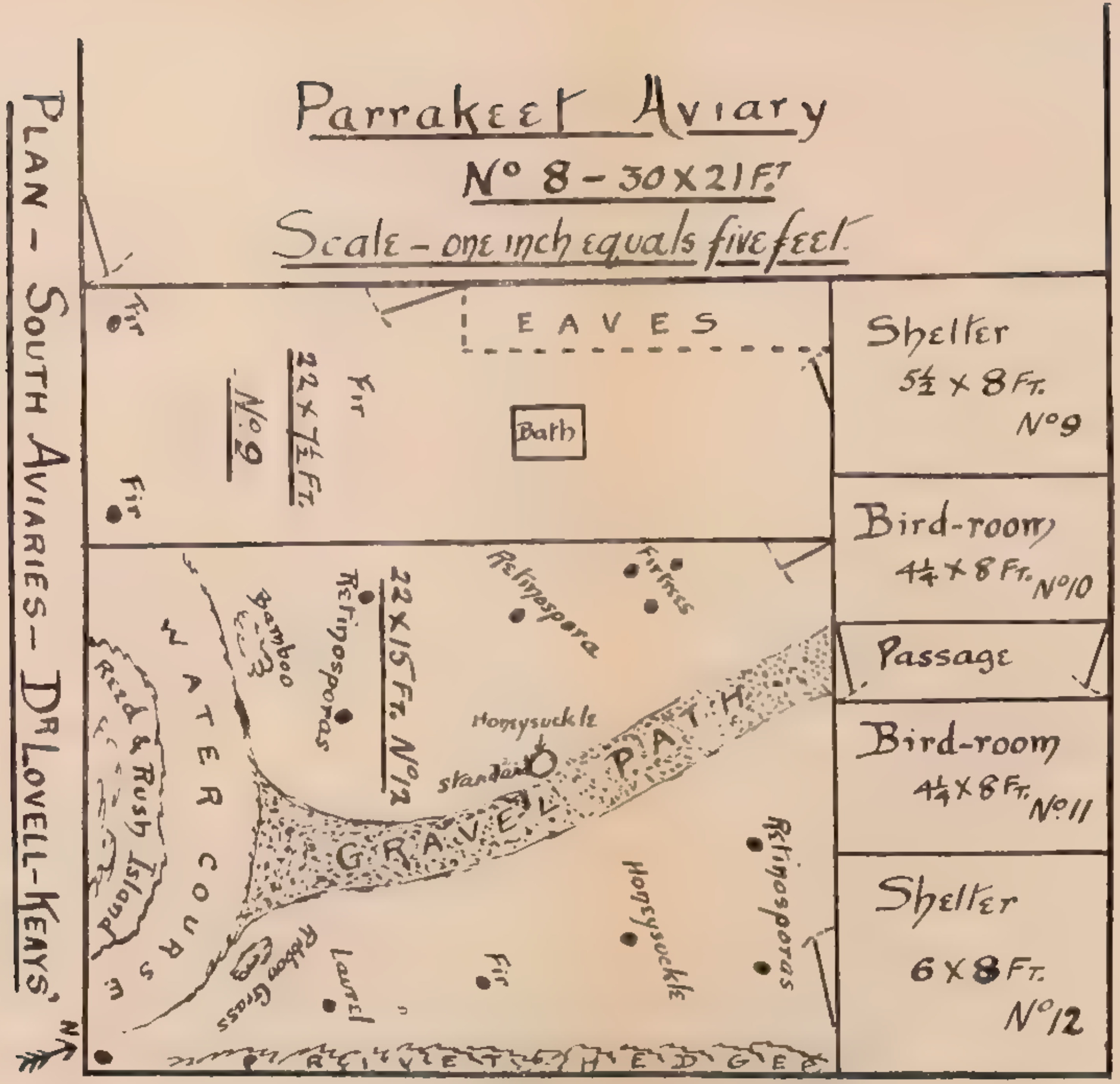
March 6.—First Oyster Catcher.
,, 6.—Numerous Solan Geese.
,, 8.—4 Lapwing.
,, 12—23.—Large flocks of Starlings (common).
,, 12.—10 Ravens, 1 Skylark.
,, 16.—Kittiwake on water.
,, 18.—2 Redshanks, 1 Golden Plover.
,, 19.—Large flocks of Razor-bills and Guillemots (black) on water.
,, 23.—Shag, busy building.
,, 24.—Rock Pipits' nest with one egg.
,, 24.—30 Eider Ducks, mostly males.
,, 26.—Kittiwakes landed on Cliffs.
,, 29.—1 Glaucous Gull.
,, 31.—2 Blackbirds, 1 Skylark, at lantern.
April 1.—Guillemots landed on Cliffs.
,, 6.—Great Skua seen coming from north.
,, 6.—1 Falcon Hawk.
,, 4.—3 Red-throated Divers.
,, 1.—Curlew.
,, 9.—1 Lesser Black-backed Gull and 4 Sparrows.
,, 12.—1 Female Blackbird.
,, 15.—Puffins arrived.
,, 16.—1 Redwing, and 1 Starling killed at lantern.
,, 18.—1 Snow Bunting.
,, 19.—2 Carrion Crows and 1 Snipe.
,, 19.—1 Merlin Hawk.

I also quote you an extract from one of the men's letters:

"Imagine a Rock Pipit building here in March, it got the length of laying one egg, then cold north wind with frost and snow came on and it has given over the notion now till a more suitable time. It laid the first egg on the 24th March. One of the Twites we have had has been troubled with asthma all winter, so to-day being fine we thought it a good opportunity of letting it away, it took a fly round for an hour or so, then came to its cage, so we took it in again."

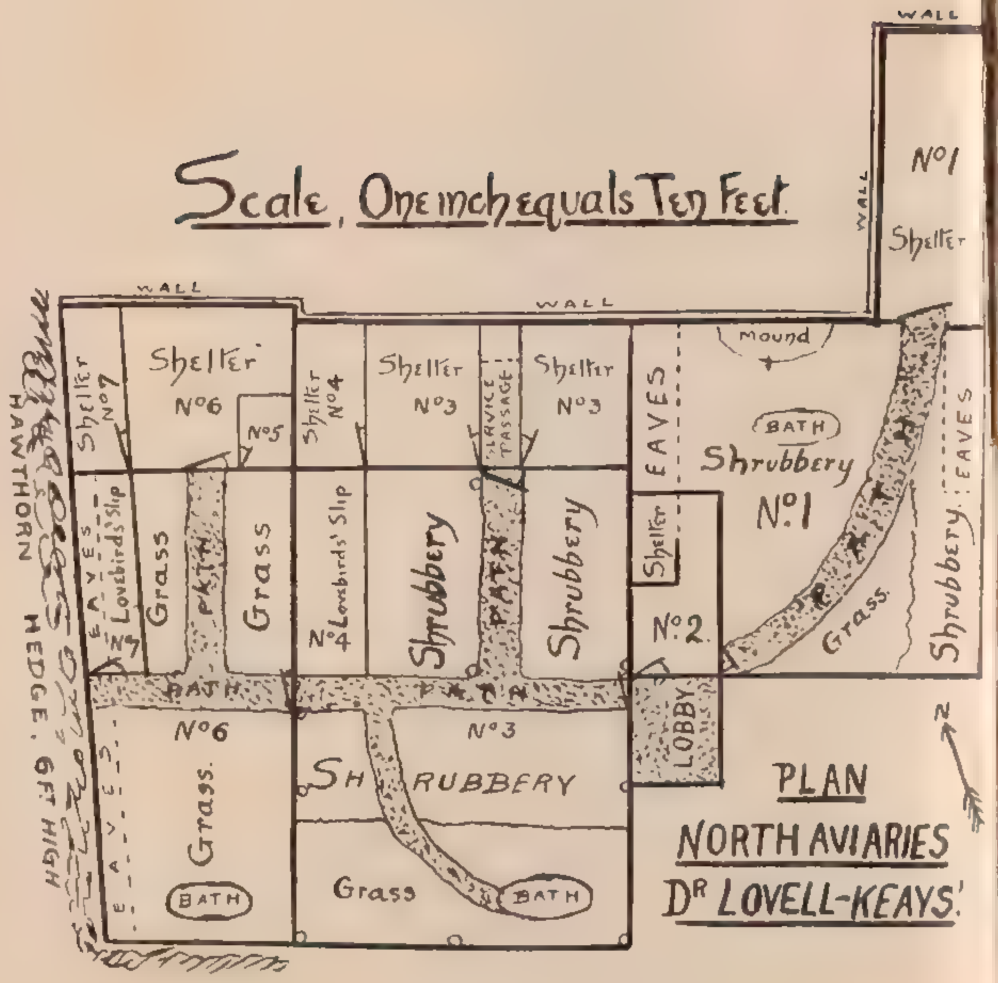
D. E. P., Southsea, 4/5/'14.

◆



PLAN – SOUTH AVIARIES – DR LOVELL-KEAYS'

Parrakeet Aviary
No 8 – 30×21 Ft
Scale – one inch equals five feet
EAVES
Fir
Fir
Fir
No 9
22×7½ Ft
Bath
Shelter 5½×8 Ft. No 9
Bird-room 4¼×8 Ft. No 10
Passage
Bird-room 4¼×8 Ft. No 11
Shelter 6×8 Ft. No 12
Retinospora
Firtrees
Retinosporas
22×15 Ft. No 12
Bamboo
Reed & Rush Island
WATER COURSE
Honeysuckle
standard
GRAVEL PATH
Ribbon Grass
Laurel
Fir
Honeysuckle
Retinosporas
PRIVET HEDGE
N



Scale, One inch equals Ten Feet

PLAN
NORTH AVIARIES
DR LOVELL-KEAYS'

WALL
WALL
WALL
WALL
No 1
Shelter
Shelter No 7
Shelter No 6
No 5
Shelter No 4
Shelter No 3
SERVICE PASSAGE
Shelter No 3
EAVES
Mound
BATH
Shrubbery No 1
PATH
Grass
Shrubbery
EAVES
HAWTHORN HEDGE, 6 FT HIGH
EAVES
No 7 Lovebirds' Slip
Grass
PATH
Grass
No 4 Lovebirds' Slip
Shrubbery
PATH
Shrubbery
Shelter
No 2
PATH
PATH
No 6
No 3
LOBBY
EAVES
Grass
BATH
SHRUBBERY
Grass
BATH
N

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BIRD NOTES:

THE

JOURNAL OF THE FOREIGN BIRD CLUB

An Easter Tour Among Members' Aviaries.

BY WESLEY T. PAGE, F.Z.S., ETC.

(Continued from Page 160).

DR. L. LOVELL-KEAYS' AVIARIES: Very few general remarks can be made, as there are twelve aviaries to note briefly, and, as with the exception of Nos. 1 and 8, which are a year old, all the others enter upon their first season this year, also being modern, call for a fairly full description, and I hope their owner will supplement these notes with a further description, and recount many episodes concerning them in our pages in the course of the season.

The photo-reproductions and plans render almost unnecessary detailed descriptions of the aviaries themselves. With the exception of the Parrakeets' Aviaries and the Weavers' Aviary, only the inner compartments were in use at the time of our visit, the more delicate Waxbills, Finches and Softbills had not yet been given access to the flights, though this was done about two days after we left. Though only in their first season the aviaries have already too many occupants, and my friend, Dr. Lovell-Keays, like myself, and many others, has yet to learn to control the desire of acquisition. By careful and selected planting the flights already possess plenty of cover and already present a picturesque appearance. Needless to say Mr. Haggie and I spent the bulk of our time here, amid the birds and aviaries; and, a beautiful garden almost in its full spring glory received but scant attention.

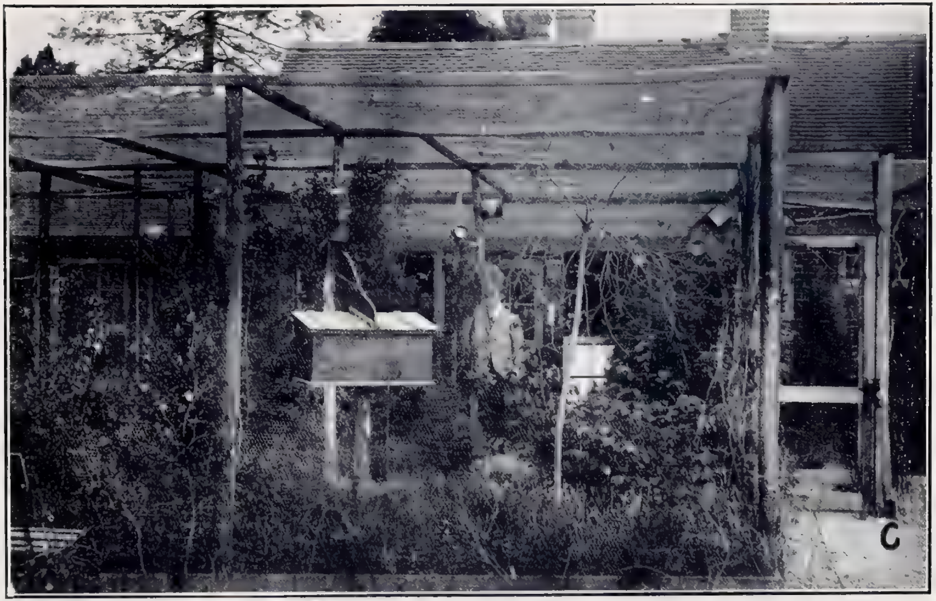
AVIARY No. 1: This aviary has been in existence for a year, and last season it housed a goodly number of Finches and Waxbills, and in spite of enlargements and alterations proceeding at intervals during the year, breeding results were not entirely lacking. This aviary is now called the Weavers'

Aviary, as many of its occupants belong to that group—the areas marked shrubbery in this aviary, on plan, have grass borders and are planted with Berberis, Hawthorn, Retinospora, Aspen, Aucuba, Elder, Apple, Hawthorn, Fir, Plum, and Docks; also Honeysuckle and Virginian Creeper to cover standards and walls.

The area of the flight is 20 × 20 × 8 feet high, less the 10 × 6 feet area of Aviary No. 2. The shelter is a substantial brick outbuilding, $15\frac{1}{2} \times 5\frac{3}{4} \times 15$ feet high and well lighted.

The occupants are as under:

Gold-fronted Fruitsuckers (*Chloropsis aurifrons*).
Waxwings (*Ampelis garrulus*).
Red-crested Cardinals (*Paroaria cucullata*), nesting.
Virginian Cardinals (*Cardinalis cardinalis*).
Mexican Rosefinches (*Carpodacus mexicanus*), have reared young—nesting.
Jacarini Finches (*Volatinia jacarini*), incubating again.
Pekin Robins (*Liothrix luteus*), 2 pairs—1 pair nesting.
Parson Finches (*Poephila cincta*), feeding young.
Zebra Finches (*Taeniopygia castanotis*), several pairs—bred in the aviary.
Orange-cheek Waxbills (*Sporaeginthus melpodus*), Grey Waxbills (*Estrilda cinerea*), 2 pairs each cross-mated.
Grey Waxbills (*E. cinerea*).
Golden-breasted Waxbills (*Sporaeginthus subflavus*), 2 pairs.
Masked Grassfinches (*Poephila personata*), incubating.
Parson Finch ♂ mated to Masked Grassfinch ♀.
Zebra Doves (*Geopelia striata*), incubating.
Cape Doves (*Oena capensis*).
Bronze-wing Mannikins (*Spermestes cucullata*), 1 pair and 2 young.
Magpie Mannikins (*Amauresthes fringilloides*), feeding young.
Nonpareil Buntings (*Cyanospiza ciris*), 2 ♂, 1 ♀.
White-headed Mannikins (*Munia maja*).
Avadavats (*Sporaeginthus amandava*).
Green Singingfinches (*Serinus icterus*), 1 ♂, 2 ♀.
Grenadier Weavers (*Pyromelana oryx*), 2 ♂, 1 ♀.
Taha Weavers (*P. taha*).
Napoleon Weavers (*P. afra*).
Crimson-crowned Weavers (*P. flammiceps*).
Orange Weavers (*P. franciscana*).
Comoro Weavers (*Nesacanthis eminentissima*).
Madagascar Weavers (*Foudia madagascariensis*), 2 ♂, 1 ♀.
Red-headed Weavers (*Quelea erythrops*), ♂.
Brown-backed Weavers (*Cinnamopteryx rubiginosa*).



Dr. Lovell-Keays' Finch Aviary—No. 3.

Paradise Whydahs (*Steganura paradisea*).
Chinese Bunting (♂), Blue Tanager (♂), Black Tanager (♂).

In pairs except where otherwise stated.

Aviary No. 2: This is a slip 10 x 6 feet taken out of aviary No. 1, the arrangement of which is clearly indicated on plan. Its occupants are a pair of Red-collared Lorikeets (*Trichoglossus rubritorques*), which had been out of doors all the winter, and were in perfect condition and beautiful plumage, forming a most attractive spectacle as they performed wonderful acrobatic feats within the precincts of their enclosure, ever and anon playing with each other like monkeys.

Aviary No. 3: This is really one of the most, if not the most important of the series, as it contains the gems of Dr. Lovell-Keays' *Passerine* series. A reference to the photos and plan will make all clear as to its general arrangement, and very few explanations are necessary. A glance at the photos will show that ingress and egress is gained by means of drop windows—this system applies to aviaries Nos. 3 to 7, and is shown most clearly in the photo of Aviary No. 6. The centre doors are mainly for attendance purposes. The shelter of this aviary is divided into two by a service passage; at the end of the passage is overhead communication between the two flights, which can be cut off by sliding doors, when required, as separate flights for winter housing of various species. A radiator at the top of the service passage keeps up a comfortable temperature during the winter months. The shrubberies in the outer flight have grass margins and are planted with Jasmine, Ivy, Aucuba, Elder, Retinospora, Privet, Honeysuckle, Bush and Rambler Roses, Apple, Hawthorn, Willow, Kerria, Clematis, etc. Docks, and similar herbage are inserted in suitable positions and the result is practical and picturesque.

This aviary contains (in pairs except where otherwise stated) the following species:

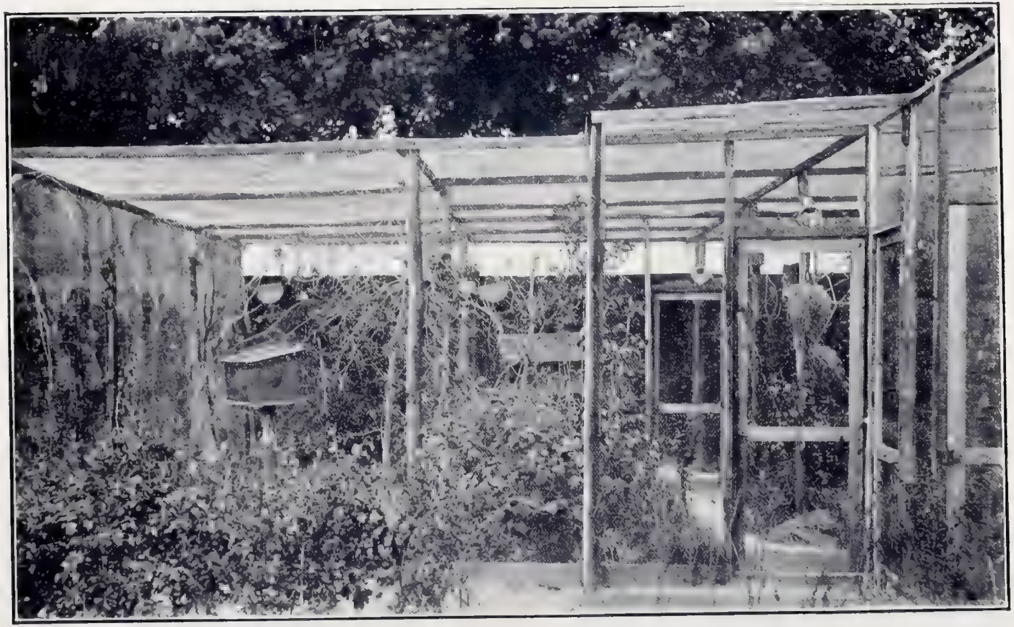
Hooded Siskins (*Chrysomitris cucullata*), 2 pairs.
Colombian Siskin (*C. colombiana*), ♂ only.
Yellow-winged Sugarbirds (*Coereba cyanea*).
Purple Sugarbirds (*C. caerulea*), ♂ only.
Blue Sugarbirds (*Dacnis cayana*), nesting—2 ♂, 1 ♀.
Necklace Tanagers (*Chlorophonia viridis*).
African Zosterops (*Zosterops virens*).
Dufresne's Finches (*Lagonosticta dufresni*).

Sydney Waxbills (*Aegintha temporalis*), incubating.
Black-faced Waxbills (*Estrilda erythronota*).
Violet-eared Waxbills (*Granatina granatina*).
Lavender Finches (*Lagonosticta caerulescens*), 2 pairs—both nesting.
Firefinches (*L. senegalus*), 2 pairs.
Crimson Finch (*Neochmia phaeton*), ♂ only.
Green Avadavats (*Stictospiza formosa*), 2 pairs.
Cordon Bleus (*Estrilda phoenicotis*), several pairs.
Blue-breasted Waxbills (*E. angolensis*).
Long-tailed Grassfinches (*Poephila acuticauda*), 2 ♂, 1 ♀.
Heck's Long-tailed Grassfinches (*P. hecki*), incubating.
Diamond Finches (*Steganopleura guttata*), 2 ♂, 1 ♀.
B.H. Gouldian Finches (*Poephila gouldiae*), 2 ♂, 3 ♀—1 pair incubating.
Masked Grassfinches (*P. personáta*), incubating.
Pectoral Finches (*Munia pectoralis*), nesting.
Chestnut Finches (*M. castaneithorax*).
Melba Finches (*Pytelia melba*), incubating.
Tri-coloured Parrot Finches (*Erythrura trichroa*).
Pin-tailed Parrot Finches (*E. prasina*), nesting.
Quail Finches (*Ortygospiza polyzona*), 2 pairs.
Black-faced Quail Finch (*O. nigricollis*), ♂ only.
Ruficauda Finches (*Bathilda ruficauda*).
Nonpareil Buntings (*Cyanospiza ciris*).
Indigo Buntings (*C. cyanea*), 2 ♂, 1 ♀.
Rainbow Buntings (*C. leclancheri*), ♂ only.
Grey Singingfinches (*Serinus leucopygius*).
Alario Finches (*Alario alario*), nesting.
Yellow Sparrows (*Passer luteus*).
Orange-cheek Waxbills (*Sporaeginthus melpodus*).
Scaly-crowned Finches (*Sporopipes squamosa*), nesting.
Cherry Finch (♀), Avadavat (♀), Diamond Dove (♂), Passerine Dove (♀), Cape Dove (♀).

Aviary No. 4: No description is necessary, as plan gives all details. The shelter is 8 × 4¼ feet, and the grassed flight is 12 × 4¼ feet. Herein are housed the following:

Orange-flanked Parrakeet (*Brotogerys pyrrhopterus*).
Canary-winged Parrakeet (*B. chiriri*), ♀ only.
Tui Parrakeet (*B. tui*), ♀ only.
Passerine Parrakeet (*Psittacula passerina*).
Guiana Lovebirds (*P. guianensis*).
Speckled Conure (*Conurus euops*).

Aviary No. 5: This is merely a netted off corner of No. 6, 3 x 4 x 6 feet high, and is used as isolation quarters for new arrivals, etc.



A Side View of the Finch Aviary—No. 3.

It contained 3 Red-headed Lovebirds (*Agapornis pullaria*), one pair and an odd bird.

AVIARY No. 6: This has a shelter 11 x 9½ feet, and is fitted with a hot water service for winter use. The flight is approximately 28 x 9 feet, the ground area is grass, crossed by gravel paths and furnished with leafless oaks, branches, nesting barrels and logs—the photo is very clear and fully illustrates the general arrangement details. It contains the following species, in pairs unless otherwise stated.

Pennant's Parrakeet (*Platycercus elegans*), 1 ♂ and 4 young.
Mealy Rosella Parrakeets (*P. pallidiceps*).
Blossom-headed Parrakeets (*Palaeornis cyanocephala*), 1 ♂ and 2 young.
Rose-headed Parrakeets (*P. rosa*), ♂ only.
Jendaya Parrakeets (*Conurus jendaya*).
All Green Parrakeets (*Brotogerys tirica*).
Budgerigars (*Melopsittacus undulatus*), 2 pairs and young.
Californian Quail (*Lophortyx californica*), with 9 eggs.

AVIARY No. 7: The shelter is 9½ x 4 feet, and the flight 12 x 4 feet—all details will be gathered from plan and photo.

It is given up to Rosy-faced Lovebirds (*Agapornis roseicollis*), two cocks and one hen. The pair are believed to be feeding young

The above series of aviaries are termed the North Aviaries, being situated at the north end of the kitchen garden, and the series yet to be described are called the South Aviaries from their position at that end of the garden, but, both series have south aspects.

AVIARY No. 8: This is only indicated on plan, as a plan and description appeared in last Vol. of "*B.N.*," and I must refer readers to the former account, merely remarking that there is a fine large flight, with only a small shelter, but this lack has been made good by an abundant provision of eaves. The birds have done well in it; it was inaugurated in May, 1913.

It contains the following, in pairs unless otherwise marked :—

Red Rosella Parrakeets (*Platycercus eximius*).
Red-rump Parrakeets (*Psephotus haematonotus*).
Ring-necked Parrakeets (*Palaeornis torquatus*).
Moustache (Banded) Parrakeets (*P. fasciata*).

Cockateels (*Calopsittacus novae-hollandiae*), 2 ♂, 4 ♀—bred in aviary.
Black-cheeked Lovebirds (*Agapornis nigrigenis*), 2 pairs—bred in aviary.
Madagascar Lovebirds (*A. cana*), 2 pairs—bred in aviary.
Green and Yellow Budgerigars, a flock.
Yellow-bellied Conures.
Tui Parrakeet (♂), mated to All Green (♀)—incubating.
Golden Pheasant (♂) and Red-crested Cardinal.

AVIARY No. 9: The plan supplies all details; here are housed pairs of Red Rosella Parrakeets and Half-moon Conures (*Conurus aureus*), the former believed to be feeding young.

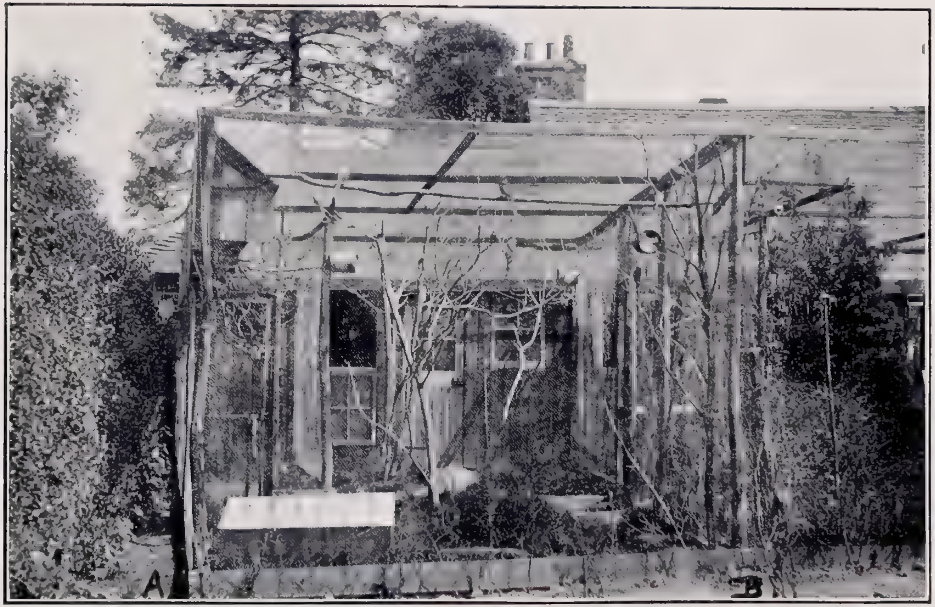
AVIARIES Nos. 10 and 11: These are used as winter quarters, birdrooms, or reception chambers, and form excellent flights for the purpose; there were no occupants at the time of our visit.

AVIARY No. 12: This aviary is a very picturesque one indeed; the small water course and island of rushes and reeds at its southern extremity is most effective and pleasing —for further details see plan. Here we saw disporting themselves amid the sunlight foliage pairs of the following species:

R.H. Gouldian Finches (*Poephila gouldiae*), 2 pairs.
Brown-backed Robins (*Thamnobia cambaiensis*).
Bearded Reedlings (*Panurus biarmicus*), 3 ♂ and 2 ♀—1 pair incubating.
Cordon Bleus (*Estrilda phoenicotis*).
Golden-breasted Waxbills (*Sporaeginthus subflavus*).
Australian Water-Rails (*Rallus pectoralis*).

On the Good Friday (midnight) and also the following night Dr. Lovell-Keays and I had the privilege of hearing the Nightingale—several birds were singing, but not pouring out the full volume of their song—he said this was the first time he had heard it this season and it was early for the district.

MR. H. L. SICH'S AVIARIES: These have also been referred to on several occasions in our pages. The main one, which is a combination aviary for Waders and Passerine birds, has now developed to such an extent that it is very fine indeed, and the cover all that could be desired, and the ground sinking in three steps or narrow terraces to the lowest level at which is the Waders' pond with iris and rushes, the whole effect of which must be seen to be appreciated. Here the rose, clematis, coniferae, etc., flourish exceedingly well, for



Dr. Lovell-Keays' Parrakeet Aviary—No. 6.

the number of birds it contains is small indeed compared to its size (48 x 29 feet). There are two other smaller aviaries; one, the Finch aviary, is a really good size, but these have only just been completed, and though there were a few nest boxes about and one or two trees, very little planting or arrangement has up to the present been done, but attached are good shelter. and a well-lighted birdroom and food stores; with these few remarks I shall leave a fuller description to come from Mr. Sich's pen at some later date. In the main aviary three young Green Cardinals (*Gubernatrix cristatus*) are already on the wing.

The occupants of the main (Waders') aviary are as follows :—

6 Ruffs, and 1 Reeve.
4 Knots, 3 coming into colour, the other most probably a hen.
3 Dunlins, all coming into colour.
2 Black-tailed Godwits.
1 Redshank, does not call, probably a hen.
1 pair Black-gorgeted Jay-Thrushes (*Garrulax pectoralis*). carrying nesting material.
1 pair Green Cardinals (*Gubernatrix cristata*), have 3 young on the wing all but fending for themselves; hen is incubating another clutch of eggs, in the same nest.
4 Twites, one pair have completed a nest.
1 pair Yellow Sparrows (*Passer luteus*).
1 pair Cuban Finches, incubating.
1 pair Bearded Reedlings (*Panurus biarmicus*).
1 ♂ Madagascar Weaver and three others, either cocks out of colour, or hens.

The Finch Aviary contains :—

1 pair Aurora Finches (*Pytelia phoenicoptera*).
2 pair Zebra Finches, 1 pair feeding young, the other incubating.
1 pair Lavender Finches.
3 Grey Waxbills.
1 St. Helena Waxbill.
1 St. Helena Waxbill.
1 pair Green Avadavats.
2 ♂ Red Avadavats.
1 hen Canary.
1 pair Gold-breasted Waxbills.
1 ♂ B.H. Gouldian Finch and 3 of last season's young not yet in full colour.
Odd Males: Parrot Finch, Java Sparrow, Alario Finch, White-throated Finch, Masked Grassfinch, and Bronze-wing Mannikin.

SLIP AVIARY contains :—

2 Paradise Whydahs out of colour.

MRS. E. A. HARTLEY'S AVIARIES AND BIRDS: We spent a most interesting half-day with Mrs. Hartley and her birds, and the time passed all too quickly, as many avicultural episodes were recalled from the past, and the popularity of aviculture and its altered conditions were discussed. We noted in cages in the house excellent specimens or pairs of: Port Lincoln Parrakeets (*Barnardius zonarius*), Grey Parrot, Grand Eclectus (*Eclectus roratus*) and a cage containing some good Gouldian and other Grassfinches. In a conservatory, amid a setting of bewildering floral beauty, was a cage full of Waxbills and the small Ornamental Finches, their exquisite condition, happy and contented demeanour fully demonstrating the constant and careful attention they received.

At the bottom of the lovely, hill-side garden are situated Aviaries No. 1 and 2; being built on a slope these are considerably above ground level and consequently very dry, with roomy and cosy shelters at back. These are given up to Lories and Parrots ,and we noticed a Swainson's Lorikeet, Chattering Lory, Red-sided Eclectus Parrots, and Orange-winged Amazon Parrot. For the past few years the Swainson's Lorikeet and Chattering Lory have been mated together, and for the past three years have annually brought up a brood of hybrids, and at the time of our visit there was another youngster being fed in the nest barrel.

AVIARY NO. 3: This is situated by the side of the house, half hidden by a shrubbery. It is a roomy, substantial structure of brick, glass, bent ironwork, and straight woven wirework. It contained quite a crowd of birds, among which we noted the following species :—

Budgerigars (a large flock).
Black-cheeked Lovebirds.
Cockateels.
Blossom-headed Parrakeets.
Red-crested Cardinals.
Virginian Cardinals.
Zebra Finches.
Waxbills (a crowd).
Mealy Rosella Parrakeets.
Red-wing Parrakeets.
Ring-necked Parrakeets.
Red-rumped Parrakeets.
White-eared Conures.
Russ' Weavers.
Napoleon Weavers.
Orange Weavers.
Red-billed Weavers.
Pekin Robins.
Singing Finches.
Cutthroats.
Java Sparrows.
Japanese and other Buntings.
Grenadier Weaver.
Indigo Buntings.
British Finches (various)
And many others.

Mrs. Hartley has not added to her stock for the past two years as she has felt unsettled in her present residence, and this year is moving into another county. I noticed very few gaps since my last visit of two years ago, and all the stock was in the best of order, and in conclusion I may state that among them are many veterans ranging up to 19 years old.

To be continued.

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Some Experiences of Cockatoos.

By the Marquis of Tavistock.

It is, I think, a not uncommon experience for an aviculturalist, particularly if he be a venturesome one, to find that while Fortune may smile upon his efforts in many directions, there will yet remain a group of birds—or perhaps one favourite species—success with which will always be denied him. In my efforts to breed the rarer and more delicate Australian Parrakeets in confinement, and to keep the hardier ones at liberty, I must admit that I have been often unsuccessful, and have had many a cherished illusion dissipated. I used to believe, for instance, that Owls lived on mice and Sparrows and did'nt touch birds the size of a Thrush. Don't they! ! I used to believe that a mechanical contrivance, such as a trap feeding-tray, would prove obedient to the laws of gravity and the will of the inventor. I now know that it obeys nothing but the evil spirit which possesses it—a cunning and malignant fiend, whose resourceful pranks I cannot yet claim to have entirely outwitted. I used to believe that fresh air and cleanliness would check the spread of any infectious ailment. I have since seen rare treasures sicken and die in the pure summer air as free as the swallows, and as healthy, until the slight but fatal taint reached them, and spread by means beyond our power to control. Yes, I have learned many things in the course of four years' somewhat varied experience—but I have not failed. In the past there has been success as well as misfortune, and, what is even better, there is promise for the future.

But with Cockatoos we have always been unlucky and of the many we have kept at different times only three now remain. Still, it is, perhaps, better to have kept and lost than never to have kept at all; experience, even if sad, is generally useful—to others, as well as to oneself. Our first venture with Cockatoos was made about twelve years ago, when a number of Roseates (*Cacatua roseicapilla*) were given their liberty after spending some weeks in an out-door aviary. On being released they flew into a tall tree near at hand, considered the situation for a few minutes and then departed *en masse*, the majority never been seen or heard of again. One stray bird, it is true, we did come across a few months later, but even that did not appear any more.

Clearly this method was not one to repeat, so next time when we got some Sulphur-crests (*Cacatua galerita*), Roseates, Leadbeaters (*C. leadbeateri*), and two cock Gang-gangs (*Callocephalon galeatum*), we turned them into a large enclosure, with the flight feathers of one wing cut. They played havoc with all the trees they could climb a cut-winged Cockatoo does more damage than a dozen full-winged ones, partly because biting forms the principal outlet for his superfluous energies and partly because his destructive work is not disdistributed over a wide area. After their clipped wings had grown, the Roseates (none of which were tame) quickly departed, and most of the White Cockatoos followed their example, so that by the beginning of winter a pair of Greater Sulphur-crests, a hen Leadbeater's, and a cock Gang-gang were all that remained. The Sulphur-crests were very attractive and made a delightful picture as they circled high in the air, their shrieks, mellowed by distance, sounding not unpleasant to the ear. When spring came round they showed evident signs of a desire to nest, but an unlucky incursion of workmen into their favourite domain disgusted them so much that they left the garden and were not recovered.

The Leadbeater's and Gang-gang, who still remained, developed a strong attachment for one another, which continued for some years. A few attempts were made to provide them with companions, but all unfortunately ended in failure. On one occasion a fine pair of Gang-gangs were obtained from a dealer, who, I believe, had brought them from a French aviculturalist. After a few days we gave the cock bird his liberty, his affection for his mate being so obvious that there appeared little danger of his straying far from her cage. Our expectations were fully justified, and if we had only kept her shut up for a few months until he had become thoroughly familiar with his surroundings, all would probably have gone well. Unluckily, however, we did not do this: the hen was released far too soon, and she and her mate left immediately and were never recovered. About the same time a second Leadbeater's was turned out, but that, too, was lost almost at once. Possibly it was not of the opposite sex to the bird already at liberty, or else the old Gang-gang may have discouraged the presence of a possible rival and driven him away from the garden. About a year later I secured a fine pair of Leadbeaters' and, being absent from home at the time, gave directions that one only was to be released. The hen was accordingly let out, but owing to an unfortunate mistake the cock was removed in his cage to a place where she was afraid to visit him, and in consequence she quickly vanished. After that I cut the cock's wing and turned him into a walled enclosure, in company with another hen, but, unluckily, she caught cold and died after she had been only a short time in my possession. In due course the cock moulted and flew out, staying for a few weeks, but eventually taking his departure owing to disturbance at his favourite feeding place. The original bird had disappeared some time previously ,and had probably died, as it is unlikely that she would have deserted her alien mate, and, if she had wandered, the Gang-gang would have left with her. *C. leadbeateri* is a very beautiful Cockatoo and it is a pity that our experiments with it at liberty were so unfortunate. As a cage and aviary bird it possesses certain rather serious drawbacks, as, although quite hardy, it is often shy and unsociable in disposition and very spiteful towards other birds. It is also given to screaming hideously and why it has been described as comparatively silent, I cannot imagine. In my opinion its screeches are infinitely more painful than the best efforts of the much-abused Roseate. After the loss of his companion we decided to provide the Gang-gang with a mate of his own species, and ultimately secured a very young hen, still partly covered with down, and quite unable to fly. The cock was much excited by her arrival, and, though rather inclined to treat her roughly at first, he soon became a model and devoted husband. For a time everything went well, but unluckily we made the mistake of leaving the hen too long in an unheated aviary, and after a cold night in November, she was picked up dead. Like most Cockatoos, the Gang-gang can only stand low temperatures when in perfect plumage, and properly hardened off. A year later, we obtained the widower another bride, this time an adult bird, who, as her predecessor had done, soon became very tame and affectionate with her human friends. The old cock, it may be added would always accept food from the hand, but he resented any liberties being taken with his person. With the new hen we determined to run no risks, cutting her wing when we turned her out, and as she had not moulted by the following autumn taking her indoors for the winter. With the return of the warm weather, she again went out, but just about the time she rejoined her mate the latter met with a mysterious accident as the result of which the greater part of one of his legs was severed clean off at the joint. The injury did not appear to affect his health and spirits, but it interfered a good deal with his activity and comfort.

As the hen again failed to moult her cut wing quills during the course of the summer, we were finally compelled to remove the stumps, after which the new feathers made a quick growth, and her powers of flight were restored. By late autumn she was full-winged and in such fine condition as to be indifferent to the worst weather.

During the winter months Gang-gangs are very silent birds and although the pair never strayed to any great distance, one might have been quite unaware of their presence in the garden for days and even weeks together. A good deal of time was spent in the cypress trees, the harsh, resinous fruits of which, they were extremely fond of; and in fact they subjected the branches to a pretty severe pruning, as they invariably nipped off each twig, which carried a berry, in order to reach the latter with greater ease. Although rejected by most, if not all, of our British birds, the seeds of the cypress and thuja are relished by the majority of the Parrot Family, even the little Black-cheeked Lovebirds eating them greedily when they are just ripe.

The flight of the Gang-gang Cockatoo is rather peculiar, and bears a close resemblance to that of the Short-eared Owl, the shape of the wings being very much the same in both. The Cockatoo also possesses a manner of alighting which is very Owl-like—shooting up on to a branch and instantly closing its wings without the preliminary flutter characteristic of most large birds. Unlike Roseates and Banksians (*Calyptorhynchus banksii*), Gang-gangs seldom take a sustained flight of a mile or more at a time, neither do they ever rise high in the air, and after circling round several times return to their original perch.

When spring came round the pair began to find their voices again and in the early mornings would indulge in the most inharmonious duets which sometimes lasted for more than half an hour without a pause. They also began to look about for a nesting-site, and finally selected the hollow branch of an oak tree about fifty feet from the ground. Both sexes took part in the incubation of the eggs, and the cock sat quite as much as the hen, whom, however, he never attempted to feed. For a long time we were uncertain whether young had been hatched or not, but after about eight weeks the old birds' visits to the nest became infrequent, and finally ceased, and examination revealed nothing but three infertile eggs—a disappointing result, but, considering the crippled condition of the cock, a very natural one. The eggs were rather large, round in shape, and of a dirty white colour.

The following autumn I bought two pairs of young Gang-gangs, which the dealer, undeterred by the fact that one of the cocks was still in down and quite destitute of quill feathers, informed me had been flying for some time in a gentleman's outdoor aviary. I put them into a cool indoor flight but, on the temperature falling below 50 degrees, two of them became so ill that they nearly died and I hastily caged the lot and brought them into a warm room. For a time they did very well, displaying for some weeks a curious habit of roosting, clinging head downwards from the tops of their cages—more like Hanging Parrakeets than anything else. Although so young and in very rough plumage both cocks showed much affection for their mates, and, an intense dislike for one another. About the middle of December one of the hens died suddenly and the *post mortem* revealed fatty degeneration of the liver—the result of a too liberal indulgence in hemp and sunflower. Both these seeds are bad for caged Gang-gangs, and are best omitted altogether from their dietary.

In January the old cock was found dead in a pond, having fallen a victim to a mysterious form of enteritis, of microbic origin, which has carried off two or three of my Roseate Cockatoo when at liberty. The hen, though obviously distressed at her loss, was not deterred from laying the following April and sitting for many weeks on her useless eggs, which, on account of the inaccessibility of the nest, we were unable to remove.

In early summer I released the best of the two young cocks, and for some days he would not leave the cage of the hen, with whom he had spent the winter. Then, unwisely imagining that her youth and the ragged condition of her wings would prevent her from straying far, I let her out as well, with the result that the pair flew off together, and, while the cock was recaptured some miles away, the hen was never heard of again. The returned vagrant I again released, while still hungry, in the presence of the old hen, who happened to be feeding on one of the trays at the time. She was extremely pleased to see him and greeted him most cordially, though, he, on his part, received her advances in a somewhat ill-tempered fashion. However, he stayed with her, which was the main thing, and after a few weeks' freedom had immensely improved in appearance and showed signs of being in breeding condition, bullying the Slender-bills, and even the Banksians, although the latter were about three times his size. The hen, however, did not nest again until the following May, when I felt confident that my hopes of young Gang-gangs would at length be realized. For a few weeks everything went well; no Owl, Squirrel, or Jackdaw dares to molest a sitting Cockatoo, whatever evil intentions it may harbour against a more defenceless Parrakeet. Suddenly, however, just about the time that the eggs were due to hatch, the old birds deserted, the cause becoming only too apparent, when a few days later I discovered that the hen was very ill and suffering from a wasting disease which had reduced her to a mere skeleton. I suspected tuberculosis and shut her up in a very warm room, giving her all the rich and stimulating foods she would eat. For a time she seemed to improve, then slowly grew worse and after about six weeks she died. Examination proved her quite free from infectious disease and showed that she had been suffering from chronic peritonitis as the result of an old internal injury. Some time later I exchanged the second cock for a new hen, but had the misfortune to lose her from an accident within a few days of her arrival. So the first cock remains a lonely bachelor and is, I fear, likely to continue to lead a solitary existence, as Gang-gangs become more and more difficult to get.

Our early failures with Roseates I have already referred to, but later experiments with this beautiful, though common, bird were attended with a temporary degree of success.

About fourteen years ago we were given a hen of this species, which had been captured in Covent Garden Market. At first she was very wild and savage, but much petting and attention from one of the servants, who happened to be fond of birds, eventually made her charmingly tame and docile with those she knew. In the summer time she was allowed her liberty with a cut wing in a grass quadrangle which lies in the centre of the house, and on the few occasions when she grew sufficient flight feathers to enable her to use her wings, she was recovered without much difficulty. After we had had her some years I decided to get her a companion and not at the time knowing the sexual difference in the colour of the irides (red or hazel in the hen, nearly black in the cock) I unfortunately obtained a second female. The two birds were quite friendly towards each other, but not affectionate and the newcomer quickly became as tame as her companion, and would allow most people to handle her. During the winter the old hen died and when the survivor was turned into the quadrangle the following spring I bought a cock to go with her. The new bird was shy and in rather rough plumage, but a few weeks in the open improved him wonderfully, and the colour of his breast deepened by at least two shades. "In the spring a fuller crimson" may not, as stated by the poet, "come upon the Robin's breast," but it certainly does upon the Cockatoo's when you keep him at liberty, and although at one time a firm disbeliever in the theory of the repigmentation of birds' plumage, I must confess that my observations on Roseates have rather shaken me in my earlier convictions on this point.

Towards the end of May the pair began to show great energy in digging holes in the turf. At first we thought that they were only gratifying their natural love of mischief and filled the holes up, but after a time they grew so persistent that I decided to let them alone. In two or three weeks they made an excavation about ten inches deep, over part of which I placed a board to provide them with a certain amount of shelter. This assistance they accepted in good part, and in due course the hen laid three eggs and began to sit. Her mate, like the cock Gang-gang, never attempted to feed her, but he would relieve her on the nest, when she went off to get a meal, though he never sat for very long at a time, and appeared glad to relinquish his charge on her return. One of the eggs got cracked and had to be removed (it was white and very small—hardly larger than a pigeon's) but after about five weeks a baby Cockatoo made its appearance, to be followed two days later by a second. The nestlings were not pretty, in fact they were horrid little objects, very red in colour, blind, and wholly destitute of any kind of downy covering. For a time they did well, but on going to look at them after a very wet night (the parents never resented the inspection of their family) I found them very weak and cold with their beaks choked with wet clay. To make them more comfortable, I half-filled the hole with moss, and the plan answered admirably, for from that time on they throve amazingly and never once "looked back." Both old birds fed their babies assiduously the process, as the latter grew older, being accompanied by a very loud and peculiar noise—"ek, ek, ek, ek, ek"—how produced I could never quite determine. While being fed the young kept their beaks all the time in close contact with those of their parents, who never paused at frequent intervals, as most Parrakeets do to regurgitate food from the crop to the mouth. The young Roseates left the nest when about ten weeks old, the cock emerging a few days before his sister. For some time previous they had quarrelled incessantly, apparently realizing that the unusual situation of their home made it possible for them to "fall out" after the fashion of the little birds in the familiar riddle! Their plumage was not unlike that of their parents, though decidedly paler, and their breasts had a greyish tint. By this time the old birds had both moulted, and for a time the whole family flew happily about together, but as soon as the weather turned cold the little ones began to look rough and unhappy, and the hen, weakened by a chill, sustained rather severe injuries by a fall off the roof, which occurred before she and her brother were caught up and caged. For a time the warmth of the house did them both good, the cock made a rapid recovery, soon becoming tame, and learning to speak a few words. The hen, however, began to have fits, and although we gave her medicine, fed her on the plainest diet, and kept her in a cool place, she grew worse, and finally died.

(To be Continued).

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An April Morning in Northern India.

By Douglas Dewar, I.C.S., F.Z.S.

In April the days are very hot in Northern India; the maximum temperature in the shade often exceeds 111 degrees. At sunset the thermometer falls rapidly and the nights are comparatively cool, so that the human being who sleeps out of doors is able to enjoy refreshing sleep. He has nothing to fear from the dew, provided he sleeps within mosquito nets.

I slept out of doors last night and awoke this morning (April 26th) before dawn. The sun rises about 6 a.m. At 5-15 the eastern sky began to brighten and the stars to go out one by one. As I was watching the Great Bear, which is near the horizon in the early morning, fade away, some Koels (*Eudynamis honorata*) and Brain-fever Birds (*Hierococcyx varius*) began to shout. These birds had been calling at intervals throughout the night, but at dawn they began to call as only these birds can. They seemed to awaken the Crows, for in a few seconds some sleepy-sounding caws mingled with their loud screams. Then the cheery notes of the King-crow (*Dicrurus ater*) were added to the chorus. A few minutes later a flood of music from a pipal tree revealed the fact that a Magpie Robin (*Copsychus saularis*) had awakened. A few seconds later a pair of Punjab Red-vented Bulbuls (*Molpastes intermedia*) began singing to each other, crying "Stick to it, stick to it."

By this time it had become sufficiently light to enable me to see what the birds were doing. Hitherto I had been able to hear them or see them very dimly. Several little Doves (*Turtur cambayensis*) were running about the lawn, picking up tiny objects. Two pairs have nests in the creeper growing over the bungalow. One nest contains two white eggs and the other two baby birds. A third pair of Doves were fussing about in the creeper, evidently selecting a site for a nest. The Sparrows now began to make much noise. There are in the house or in the verandah not less than three nests, one of which appears to contain eggs, while the others are in course of construction. Suddenly a hen Purple Sunbird (*Arachnechthra asiatica*) flitted past my bed, carrying something in her beak. She flew to the creeper and then I noticed that she had a nearly completed nest hanging from the creeper in front of a small window. The upper part of the nest, including the porch, was complete, and the bird was adding finishing touches to the lower part in the shape of bits of straw, grass, and paper. While I was watching her fussily hopping about on her nest, there arose a great uproar on the lawn. Turning round to see the cause of this I beheld seven Common Mynas (*Acridotheres tristis*) squabbling. Two pairs were fighting like furies, grappling with beak and claw, and fluttering their wings so as to display the white bar. The other three were looking on and shouting, and now and again trying to peck at the combatants. Suddenly the whole flock flew into some bushes. The next excitement was afforded by a pair of Rollers or Blue-jays, as they are commonly called (*Coracias indica*). These were throwing themselves about in the air like things demented, and uttering harsh cries. After behaving thus for fully a couple of minutes, they settled on trees. These birds have a nest in an old mango tree in the compound. The sun had by this time nearly risen, so that I could see plainly the beautiful blues in their wings. For some minutes a pair of Hoopoes had been busy seeking food for their young. They had been alighting on the grass in front of the servants' houses and probing the soft ground with their bills, extracting something and carrying it with undulating flight on to the roof of the bungalow. I determined to find the nest as soon as I rose from my bed. But, as the sun had not yet lighted the topmost branches of the trees, I decided to linger a little longer. I was rewarded by witness-ing a cock Koel fly across the garden. He alighted in a pipal tree. Almost before he had settled a Grey-necked Crow (*Corvus splendens*) attacked him and made him fly off, crying "pip. pip." The Crow pursued him to another tree, from which it drove him out, then to a third and a fourth, and eventually both birds flew out of my sight. The Koel is parasitic on the Crow, and during the breeding season in June and July such chases are of frequent occurrence, but they are somewhat unusual at this season of the year. After listening a little longer to the chorus of the birds which was now augmented by the songs of the Sunbird an dthe Brown Rock-chat, and the "tonk, tonk, tonk," of the Coppersmith I got up and went on to the roof to look for the nest of the Hoopoes (*Upupa indica*). The roof is a flat one and there is a flight of steps leading up to it, so the attaining thereto does not involve any gymnastic operations. On arriving on top both the parent Hoopoes were waiting for me; one had the bill empty, while the other was carrying something; the former swore at me, expanded his corona and bowed his head. This is the attitude assumed at all times of excitement, whether the bird is hissing at an enemy or showing off to its mate. As I approached the nest the parent birds flew off. The presence of the nest was betrayed by a lot of droppings on the roof below the hole. The roof is composed of three terraces. The highest is the roof of the lofty middle rooms, then there is a lower terrace which forms the roofs of the outer rooms, less lofty by four feet than the inner rooms; then again, at a lower level is a third terrace which is the roof of the verandah. In the walls of the middle rooms, quite near the roof are a number of small holes, made to let air into the house from the outside. The diameter of these holes is some six inches. One of these had been partially blocked up with brick and over part of the outer orifice was stretched a metal grating. I pressed this grating and was greeted with hisses, betraying the presence of young birds. I then put on a pair of gloves (having had experience of the filth of a Hoopoe's nest), removed the grating and peered into the hole. As soon as my eyes became accustomed to the light inside, I was able to distinguish several young birds. I managed to pull out four. The fifth got into a chink between a brick and the upper part of the cavity and wedged itself in so tightly that I was unable to take it out without fear of hurting it. The four youngsters I had pulled out formed a curious crew. One of them was almost ready to leave the nest, while one had scarcely a feather on him. The latter must have been hatched out fully a week after the former. Between these two in age came the other two birds. The first plumage of the nestling is in all respects like that of the adult, and the young bird erects its crest when alarmed or angry just as the adult does. The beak is much shorter than that of the adult and not curved. It is very like that of a Woodpecker, being considerably stouter at the base than at the tip. The corona does not fold back when closed as neatly as it does in the case of the adult bird. Young Hoopoes, just before they leave the nest, look very like Woodpeckers, and, but for the very Hoopoe-like plumage, might easily pass for young Woodpeckers. No one looking at a Hoopoe nestling can fail to be struck by the resemblance. It would seem that Hoopoes are nearly related to Woodpeckers. Having inspected the young birds I put them back in the nest and replaced the grating.

Before leaving the roof I went to the edge in order to look at one of the Dove's nests, which was in a creeper growing over the wall. I was thus able to look down at the nest. A parent bird was sitting on it, brooding two young birds. I put it off by clapping my hands and it alighted on the ground. To my astonishment, immediately on reaching the ground it ran along dragging its left wing as though this was broken. I had never before seen a Dove act in this way. It ran thus for a couple of yards before it was lost to view behind a projecting verandah. I rushed down the steps in order to obtain another view of it. It was still behaving as though its wing were broken; after running like this for a few yards it took to its wings. It is of interest that the bird continued to behave as though its wing were broken when it could not see me or I see it. This, I submit, tends to confirm the view I have put forward repeatedly, that the so-called simulation of injury is not an intelligent act, but an instinctive one, merely an expression of the fact that a bird is torn between conflicting emotions, that of a desire to stay with its young and of wishing to escape from a creature of which it is afraid.

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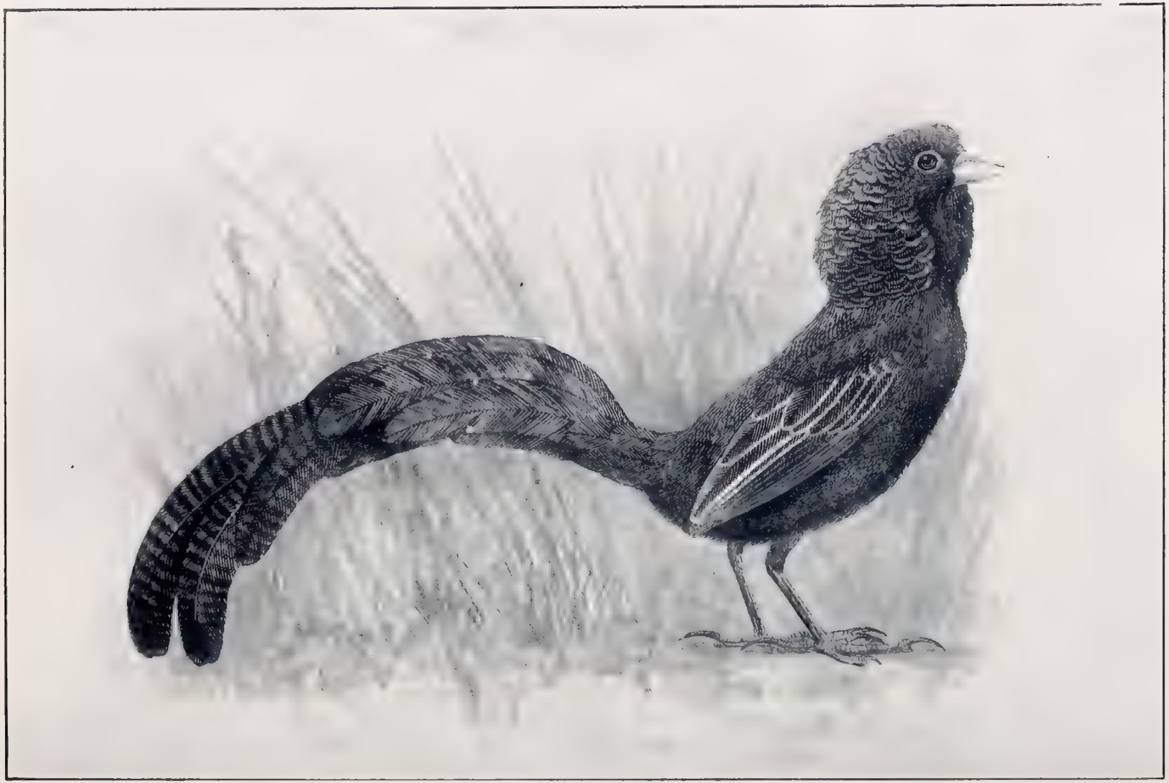

From Life by H. Goodchild.

Jackson's (Drooping-tailed) Whydah.

Jackson's Whydah in Captivity.

(*Depranoplectes jacksoni*).

BY WESLEY T. PAGE, F.Z.S., ETC.

I am repeating the plate of this bird, as since 1911 we have enrolled many new members, who probably do not possess the back volume. Our esteemed member, Mr. E. W. Harper, has sent me a small consignment of British East African species, among which were two true pairs of this species and several odd cocks—one of the pairs I have purchased for my own aviary, and though I have only had them under observation about three weeks, I think it will be worth while, and of interest, to note their demeanour in a roomy garden-aviary.

Bad Points.—I will name these first: 1, Rather destructive to aviary plant life: 2, Obstreporous and noisy demeanour. Of course it must be noted that this only covers the period of three weeks, but it confirms the opinion I had formed of the species from observation at the London Zoo.

Good Points.—Not pugnacious to other birds; handsome appearance; grotesque and intensely interesting demeanour.

Wild Life.—This I shall not give in full, but must refer my readers to Vol. II. of *Bird Notes*, N.S., pages 300-2, and shall merely quote for comparison purposes from the "Ibis" such details as I wish to compare with aviary demeanour.

"The males of this species form a playground in the long "grass on the plains. The playground made by each bird is circular, "about two feet in diameter; the grass is beaten quite flat inside "the ring, except one tuft in the very centre. A flock of these birds "playing has a curious effect, as they jump about three feet into the "air and drop again into the circle, each bird jumping from five to "ten times in a minute."—(Sharpe, Ibis, 1891, p. 246).

"Like *Penthetria laticauda*, the cock birds make playgrounds "for themselves, on which they dance up and down on and off through-"out the day, but more vigorously in the early mornings and late "evenings . . . . . From an ant-heap close by I watched "for a long time four cock birds within forty yards of me; and as "The sun was within half an hour of setting, and shining brightly "at my back, I had a first-rate opportunity of noticing how they "assumed their curious attitude . . . . . . The actual position "is as follows: The head is thrown back like that of a proud "Turkey cock, the beak being held horizontally. The feet hang "downwards; the tail is held straight up till it touches the ruff at the "base of the head and neck, the ends of the feathers falling in a "curve downwards, with the exception of the two tail-feathers, which "are held outward and downward. While actually rising in the "air the half-open wings are worked with a very quick shivering "motion, and the feet are also moved up and down very rapidly. "The bird springs straight up in the air, sometimes a few inches, "and sometimes to a height of two feet, and then drops. The whole "of the plumage is much puffed out during the performance. . . . . "Only on one occasion was a female present on the playground.— "(Jackson, Ibis, 1899, p. 599)."

In the aviary.—For the convenience of transit purposes the tails of the males, in colour, were cut short, only about one inch of the beautiful, sickle-shaped tails being left—that the end justified the means is evident from the result; all those shipped arrived alive and all are still living; but this tail mutilation only adds to the bird's grotesqueness when playing.

In the aviary these birds are not wild, and I have had the opportunity of watching their play from a distance of barely three feet and thus have an advantage over the field naturalists quoted above, for I have observed the *whole* of the ground movements.

The first reference must be to the ground: the place chosen was about four feet from the aviary-bath (the bath is 4ft. x 3ft.) and just on the border of the irregular patch of growing grass occupying the centre of the aviary and only about eighteen inches from the aviary front. Here were growing four tufts of coarse grass forming a square of about twelve to fifteen inches, one side of which abutted on the grass in centre of aviary, the other three sides being surrounded by bare earth, which had been recently turned over. The same day the bird was turned out it chose this spot, and has retained it since (a period of three weeks) and shows no inclination to make any change, in fact it guards it very jealously and drives off by furious rushes such birds as Grey-winged Ouzels and Malabar Mynahs, whene'er they trespass thereon. The four tufts of grass were about twelve inches high when it commenced operations; it speedily reduced them to about four and keeps them religously cropped to about that height. Its playground does not form a complete circle, for it has not, as yet, beaten down the grass, but has been content with the bare earth surrounding the three sides of the square formed by the tufts of grass: here it has made a *beaten* track, forming about two thirds of a cirle or a little more, the extreme measurement of which is two feet across. I should note here that I have noticed no scratching movement, for whereas it was loose, newly dug ground, the area used now resembles well trodden earth.

The movement—performance would be the better word—commences with the throwing back of the head, jerking straight up the stumps of its tail, dropping its wings, and the puffing out of its plumage, then it commences to prance about, to and fro, backwards and forwards along its playground, uttering the while its noisy, chattering song, the notes (?) sounding as if split—this goes on for nearly a minute, then a bound is made into the air, usually about a foot high or a little less, on dropping to the ground it prances about again a little and a higher leap is taken, then another prancing run round his playground, another leap, and yet another, the last leap usually being the highest, and varying from two to three feet; after which it flies away to a branch, to strut about there, and puff out its plumage and shake about its larger feathers, with a slight rattling or rustling sound before settling down to a rest. In the early morning and evening, the performances are repeated with very short intervals, but are less frequent during the middle portion of the day.

As regards the leaps in the air, these take the form of an inverted U, so—∩ and differ but little in this respect whatever the height leapt. I need not describe these further as I should only be repeating what I have quoted from the "Ibis."

Re the ground movement, *i.e.*, as regards the dropping of the wings, this is very ponounced and is strikingly similar to that of the Peacock—the wings are dropped so that they all but touch the ground, the primaries being much more extended than the secondaries, and the former are shaken much less rapidly than the latter—the vibratory movement of the secondaries being almost too rapid for the eye to follow.

There is also another method of attitudinizing, which forms part of the ground performance: the bird makes a pause in its prancing and plants its feet firmly on the ground, still keeping the proud Turkey-cock posture, its wings dropped and tail spread somewhat laterally and shakes its body about. It is a lateral shake, somewhat resembling the demeanour of a petulant child, though there is no petulance with the bird, but rather coquettish pride. This movement or attitude is always preceded and followed by the prancing-runs.

The whole period the bird had been in the aviary, the performances have been gone through many times daily—the playground was commenced within an hour of the bird being put out of doors, though with those kept all together in an indoor flight no playground has been formed.

I am in hopes of seeing a completed nest in the aviary, even if they do not get as far as eggs, for I have noticed the male beginning to bend over the stems of a clump of tall grass. In a state of nature the nest is placed within a few inches of the ground, and the surrounding grass is bent down and woven into the nest, not only making it almost watertight, but also effectively screening it—and I am hoping to see the completed nest in due course.

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A Further Note on Sexing Rosellas.

By Dr. L. Lovell-Keays.

Through the kindness and courtesy of our member, Mr. Shore Bailey, I am enabled to handle the dead body of a known hen Rosella, and examine it more thoroughly than the living specimen. He points out that the green spot is not present, but that the barring of the wing (under surface) is. The green spot is, in this obvious hen bird, conspicuous by its absence, although a few of the red feathers on the nape are edged with green. It is satisfactory to get this point cleared up once and for all. On carefully examining the under surface of the wing I find the white entirely absent on the first and second primaries. On the third it is just discernable, and on the fourth distinct. It is largest on the fifth, and gradually gets smaller till the tenth, where it is still quite distinct and nearly semicircular in form. The barring is continued very faintly over the first three secondaries. The position of the bar is almost the middle of the flight feathers.

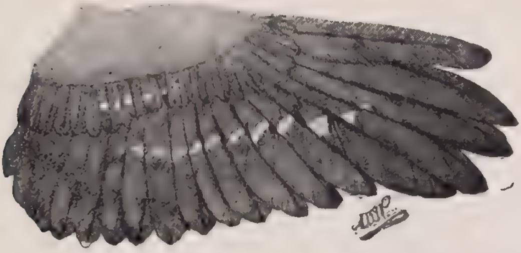


Diagram of underside of wing, Axilliaries not shown.

If one turns aside the blue axillaries we find a smaller white bar underneath them. This crosses the under wing-coverts and begins exactly where the barring of the flight-feathers leaves off. It begins at the tenth under wing-covert very faintly, reaches its maximum at the twelvth, and ceases to exist at the fifteenth. It is so completely hidden by the blue axillary feathers as to be easily overlooked. We are sorry Mr. Shore Baily had the misfortune to lose his hen bird by accident, and thank him most cordially for sending it along in order that these points may be verified.

All that remains is to get a cock bird with the green spot. I maintain I have seen one. If that be so the green spot must be relegated to the limbo of obscurity and as it is so misleading, the sooner the better.

Birds of the Jhelum District.

An Ornithological Diary From The Punjab.

By H. Whistler, I.P., M.B.O.U.

(*Continued from page* 136).

April 1.—In the early morning a female of the Great Himalayan Barbet (*Megalaema marshallorum*) was frequenting the tops of the higher trees in my compound—this must be a very rare straggler as low as this.

Several Himalayan Black Bulbuls (*Hypsipetes psaroides*) also in the compound. The majority had already left in March, and the remainder left during the first week of April, the last date on which the species was noted being April 8th.

April 2.—The first Yellow-throated Sparrow (*Gymnorhis flavicollis*) of the season noted. This Sparrow is a very common summer visitor, arriving for the purpose of breeding: in characteristics and note it is somewhat reminiscent of the House Sparrow, except that it is almost entirely arboreal. The eggs are similar to the heavily marked brown type of the more familiar bird; the nest is built in holes, usually of trees. I have noticed this species feeding freely in company with the Purple Honeysucker (*Arachnecthra asiatica*), at the white flowers of a coarse shrub which is common on bare stony ground.

A nest with three eggs of the Bay-backed Shrike (*Lanius vittatus*), found in a thorn bush—the first of the season. A Blue-throat (*Luscinia suecica*) seen.

April 3.—Went on the river, which had risen greatly; there were many Waders about, evidently birds passing through on migration. These included large numbers of Stints (probably both *Tringa minuta* and *T. temmincki*), and a fair number of Redshanks and Greenshanks. I secured a couple of specimens, in the handsome breeding plumage, of the Green Sandpiper from a small flock. The presence of flocks of this species on the river sand banks is a sure proof that migration is in progress. Normally it is found singly in pools and marshes, and but rarely on the sand banks. Two Little Terns (*Sterna minuta*) were first noted this year. Seven Shovellers (including two drakes in full plumage) and a spring of Teal were also on migration. A single Ruddy Sheldrake and five birds that were either of the same species or else some kind of Goose were seen.

On the golf course a party of Ashy-crowned Finch-larks (*Pyrrhulauda grisea*) were noted—these were also on migration.

Night Herons heard calling after dark.

April 4.—The first Cuckoo (*Cuculus canorus*) heard in the Rak.

A Gull-billed Tern (*Sterna anglica*) observed beating up and down over the fields of growing wheat which it quartered almost as regularly as a Harrier. I did not see it catch anything, so do not know what it was looking for.

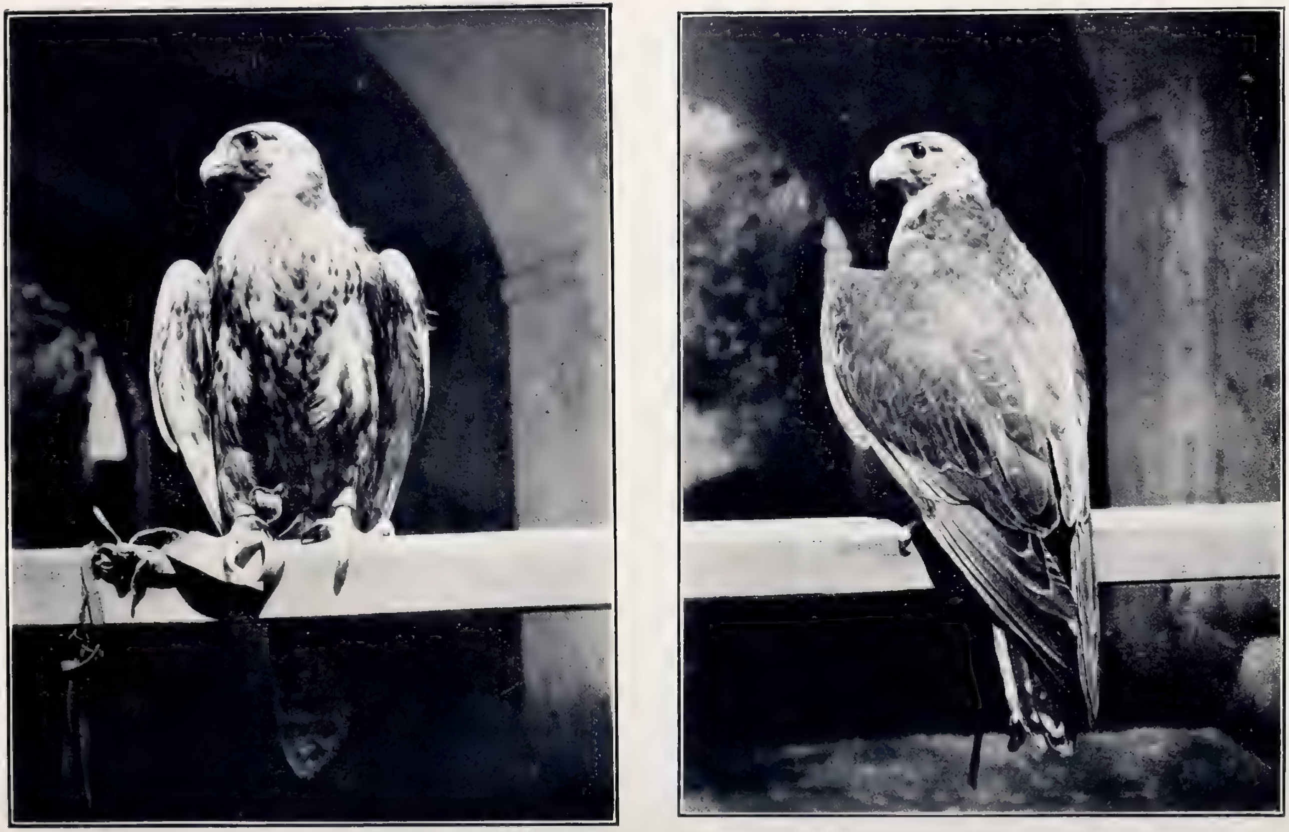
In the compound I had a momentary glimpse of a Dove that was almost certainly *Turtur ferrago*. However, I saw no more though one would expect to find the species on migration now.

A Common Kingfisher (*Alcedo ispida*) was frequenting the river bank where it was overgrown by the jungle of the Rak.

Night Herons squawking again after dark.

Short-billed Minivet (*Pericrocotus brevirostris*) seen for the last time this cold weather.

April 5.—Last date on which the Indian Grey Tit (*Parus atriceps*) was noted. I went out after Quail, but in spite of call



Photos by H. Whistler.

Frontal and Dorsal View of Saker Falcon (*Falco cherrug*, Gray).

birds having been put out only a few (under a dozen) were flushed—it seems to be a very bad year for them.

Nests of Red Turtle Dove and Purple Honeysucker with two and three eggs respectively found in the compound.

A Rufous-backed Shrike (*Lanius erythronotus*) turned up in the compound where it was noted until the 8th April.

Three Starlings seen, were the first noted since 26th March. A Blue-throat.

April 6.—A high east wind and rain brought a great rise in the river, so that by dark the golf course was entirely under water. Here a party of five Gull-billed Terns was fishing persistently for some time, beating up and down; finally they all left for the river. A flight of five or six Greenshanks and Green Sandpipers were also feeding there, as well as numbers of Swallows (*Hirundo rustica*) and Sykes' Striated Swallows (*Hirundo erythropygia*). About a dozen Herons were noted flying north, calling to each other at intervals —these were migrants.

Four Night Herons noted at dark on the big peepul tree in my compound.

The following migrants were noted for the first time: Wire-tailed Swallow (*Hirundo smithii*), Blue-tailed Bee-eaters (*Merops philippinus*), and Pond Heron (*Ardeola grayi*). Large numbers of Wagtails passing over Northwards. A few Starlings noted.

April 7.—Two or three Blue-tailed Bee-eaters.

April 8.—Two Alpine Swifts (*Cypselus melba*) passed over, flying in a north-easterly direction.

A nest with four eggs of the Jungle Babbler (*Crateropus canorus*) found; it was the usual loosely built structure of grass and roots placed about 15 feet from the ground in a branch.

A number of Sykes' Striated Swallows (*Hirundo erythropygia*) and Common Swallows noted; also the following birds: Small Minivet (*Pericrocotus peregrinus*), Gull-billed Tern, King Vulture, Kestrel, and a male Indian Redstart (*Ruticilla rufiventris*).

There were a number of Harriers about the first half of this month, mostly *Circus aeruginosus*, but also some of another species not identified.

April 9.—Two Shikaris arrived bringing a fine Saker Falcon (*Falco cherrug*) which they had caught on the previous day—it was a trained bird, which had either escaped or had been released by its owner at the end of the Hawking season—for few people keep this fine Falcon through the moult, as it is cheap to buy freshly caught, and its appetite is a large one, so that it is really economy to buy afresh every season. Anyhow this bird could not have been loose long as it came readily to the hand or lure, but it was very weak and thin and inclined to "scream." The usual quarry for which the Saker is trained is the Houbara Bustard or the Hare, while occasional ones are flown at Kites. This individual bird is figured on the accompanying plate.

A fine old white male Paradise Flycatcher (*Tchitrea paradisi*) noted in the garden for the first time this year; the species is properly a spring and autumn passage migrant, an odd pair or two only remaining to nest in the Rak. In the Salt Range, however, it breeds freely in famous gardens of Chua Saidan Shah.

There are at present a number of Tree Pipits (*Anthus trivialis*) and Rose-finches (*Carpodacus erythrinus*) about, passing through on migration.

Many Swallows (*Hirundo rustica*) and Sand Martins (*Cotile riparia diluta*) flying over the corn fields in the evening.

A Teal, a White Stork (*Ciconia alba*) and a small party of Wood Sandpipers (*Totanus glareola*) noted.

April 10.—The first Golden Oriole (*Oriolus kundoo*) of the season.

Spent the day on the river which was greatly swollen, though the recent floods had subsided, leaving, however, their mark in the shape of changes in the islands and sandbanks; all the nesting colonies of Terns and Pratincoles have been washed away, and most of the birds themselves seem to have departed temporarily in disgust. However, on a high-lying patch of sand mostly covered with stones, which had escaped the general inundation, I met with a pair of Great Stone Plovers (*Esacus recurvirostris*) and made sure from the way they watched me that they had eggs. One bird had run off the patch of sand as I approached it, but the number of stones and the state of the sand did not allow me to carry back her tracks. As the patch was not very large I started to search at random, and had covered most of the ground when I noticed near one side that there were many of the bird's footprints on the sand between the stones. Remembering that the immediate neighbourhood of nests of this species is often rather trampled I looked carefully and soon saw the nest. Two eggs were lying in a shallow hollow scraped in the sand; they were placed slightly apart with their longer axes parallel, but they were pointing different ways. No material of any kind was placed in the nest hollow.

The Ducks, Geese, and Ruddy Sheldrakes had practically all gone—only two or three small parties of duck were seen, amounting in all to about twenty individuals; these probably included Gadwall and Shovellers.

Waders were also scarce—only three or four Common

Sandpipers, one Green Sandpiper, a Redshank or two, an occasional odd bird and a small party or two of Greenshanks, and two small flights of Stints. Two other parties birds in the number of Little Egrets (*Herodias garzetta*) which had arrived in their summer quarters, and with them were several Great White Egrets (*Herodias alba*) and Common Herons (*Ardea cinerea*) doubtless only passing through. With one party of Herons was a single Pelican Ibis or Painted Stork (*Pseudotantalus leucocephalus*), a flock of six Black Ibis (*Inocotis papillosus*) came circling down out of the sky to settle with a good deal of clamour on some gaunt thorn trees.

On the way to the river in the morning the following interesting birds were noted: A King Vulture, two Black Vultures (*Vultur monachus*), a Sparrowhawk (adult female), a pair of Lugger Falcons, and a number of White-capped Buntings (*Emberiza stewarti*) which must have been on migration, as I have not seen them as low as this before.

On a roadside tree a male Red-headed Merlin (*Aesalon chicquera*) was noted feeding on a small bird, and investigation disclosed the fact that the female was sitting in a new but empty nest fairly high up in a neighbouring thorn tree. Both birds hung about most persistently so I had the nest examined again on the 24th April, when it contained four eggs.

April 11.—The first Koel Cuckoo (*Eudynamis honorata*) of the season heard in the compound where it was calling "Ko-el," and "Who are you?" This common species is parasitic on the House Crow (*Corvus splendens*). Last year in one Crow's nest I found three Koel's eggs, and no Crows. In these parts the species is a summer visitor only; the majority leave in September, but a few stay over into the first week of October.

There are at present a number of Willow Wrens about on migration; the commonest is the Siberian Chiffchaff (*Phylloscopus tristis*), but I have obtained the Large Crowned Willow Wren (*P. occipitalis*) and a third species which is probably referable to the Green Willow Wren (*P. viridanus*).

April 12.—Two Storks were seen by the Rak, which can hardly have been anything but the White-necked Stork (*Dissura episcopus*)—a rarity in these parts.

A fine pair of Crested Honey Buzzards (*Pernis cristatus*) passed by my bungalow. Several Herons were noted sitting on the sandbanks by the river, and with them was a bird which was probably the Pelican-Ibis noted on the 10th April.

April 13.—This month has seen the passing through of large numbers of Wagtails on migration, representing, as far as I could tell, nearly all the species that occur in these parts, but, owing to a difficulty in obtaining specimens, I have been unable to identify satisfactorily all the races of Yellow Wagtail.

April 14.—Black-throated Ouzel (*Merula atrigularis*) noted for the last time; it has been scarce all the month.

An egg of the King Vulture (*Otogyps calvus*) obtained from the hilly ground at the foot of the Salt Range, about 12 miles from Jhelum; in this part trees are exceedingly scarce, and this nest, as also a second nest containing a newly hatched young bird, was built only about 15 feet from the ground on a gnarled old thorn tree. The nest, which was very large and appeared to be the accumulation of years, was lined with coarse hill grass.

The Red-breasted Flycatcher (*Siphia parva*) continues common.

April 15.—A large Eagle Owl in the compound appeared to be the Rock Horned Owl (*Bubo bengalensis*) and not the common Dusky Eagle Owl (*B. coromandus*). The former occurs in the Salt Range commonly enough, but the latter species is the common bird of the Rak.

April 16.—A Crested Honey Buzzard (*Pernis cristatus*); a Cuckoo (*Cuculus canorus*) heard calling on two occasions.

April 17.—A Cuckoo heard calling.

Left Jhelum on transfer to Hissar District (about 300 miles south of Jhelum) where I arrived on April 27th, after breaking my journey at several places. The only points worth mentioning for this period are as follows:

All through the Southern Punjab (*e.g.* Kalka to Karual and Delhi) Rose-coloured Pastors (*Pastor roseus*) were very numerous on migration, a few being noted as far north as Gujranwala. Now in Jhelum none had appeared, nor did I see any there on the spring migrations last year, although a small number passed through on the autumn migration in August and September. In Rawal Pindi district, too, I have only observed a few birds, so it seems probable that the main line of migration of the enormous numbers that occur further south must be somewhere more to the west of the Salt Range; anyhow they pass through Kohat in great numbers. This species is certainly irregular in its movements, but it would be of great interest to work out the exact passage route.

At Jullundon I found Tree Pipits (*Anthus trivialis*) numerous on migration. At the same place two interesting nests were found. The first was that of the Indian Shikra (*Astur badius*); it was a light untidy structure of sticks placed on the end of a broken bough about thirty feet or so from the ground in a large Peepul tree and contained three fresh eggs. The parent birds were rather pugnacious and chased passing Crows and Kites.

On a huge Cotton-tree or Cymbal I noted a male Grey Hornbill (*Lophocerus birostris*) sitting on top of a large boss or excrescence of the trunk into which he was thrusting his beak; a little observation showed that there was a small hole in the top of the boss; this was the entrance to a nest and in it was the imprisoned female, which the cock was feeding. I had the nest examined and found that the original hole had had the entrance plastered up, leaving an aperture just sufficient for the cock to feed the female through. The plaster was composed of very hard dry earth, in which were a certain number of hairs, and numbers of minute seeds of the fig type, and from this I presume that the earth is applied with saliva formed by the bird after feeding on the fruit of some form of *Ficus* trees; the seeds of some species of *Ficus* are used by natives in making bird-lime.

The hen bird was taken out of the hole, but beyond being rather fat and having the tail feathers greatly bent there was nothing very remarkable about her, as she had clearly not been in the hole long: there were no eggs, so I put the bird into an empty room to see if the excitement would make her lay; in a few hours she laid an egg but the shell was broken; it was apparently a long oval, dead white in colour, the shell being fairly fine in texture and slightly pitted. The bird was quiet and docile, but I was unable to keep her for various reasons, and so released her. She was still able to fly..

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Editorial

NESTING NOTES: Encouraging reports are coming in from many aviaries, of which we give brief notes as under:—

REV. G. H. RAYNOR:

Has young Mealy Rosella Parrakeets in the nest, fourteen days old and doing well.

MR. W. O. MONTGOMERY:

Young. Olive Finches, 2; Californian Quail, 17.

Incubating. Ribbon Finches and White-headed Mannikins.

Mr. Montgomery writes:—"A Bengalese hen has three "young in the nest under rather uncommon circumstances. "She first mated up with one of her own kind and then with "an odd cock Silverbill. Both the Silverbill and Bengalese "cocks assisted in the building of the nest, and also in the "duties of incubation. All sleep in the nest, so what the "young are I cannot say."

DR. L. LOVELL-KEAYS :

With Eggs. Bearded Reedlings, nest built in a converted travelling cage.

"Fully fifty per cent. of my birds are nesting, but I "have already had a number of clear eggs; the tendency to "nest is prodigious. The Gouldians instead of rearing their "young have gone into moult.—L.L-K."

Brown-backed Robins have built—no eggs yet.

Being Fed. Rosella Parrakeets and Rosy-faced Lovebirds.

Young. Bib, Zebra and Mexican Rosefinches on the wing.

MR. W. T. PAGE :

Young. Zebra and Olive Finches, also an Hybrid Zebra Finch × Bengalese. The first broods of Grey-winged Ouzels and Red Mountain Doves not fully reared. Red Mountain Doves being fed in nest.

Incubating. Grey-winged Ouzels, Red Mountain Doves, Olive Finches, Zebra Finches, Grey Finches, Lesser and Mealy Redpolls.

Building. Gold-fronted Fruitsuckers; Malabar Mynahs; Jackson's Whydahs; Speke's, Napoleon and other Weavers; also Gold-fronted Finches.

MR. R. SUGGITT :

Incubating. Lesser Grey-headed Guans (*Ortalis vetula*). Numerous Finches, Grassfinches, etc., are also nesting.

CAPTAIN J. S. REEVE (Leadenham) :

Young. Cuban Finches on wing, Lesser Redpolls five days old and doing well.

MR. J. SMITH (Kendal) :

Young in Nest. Stanley and Many-colour Parrakeets.

Our member, Mr. A. Ezra, has received a private consignment of Indian Sunbirds; also some Red-headed Bullfinches (*Pyrrhula erythrocephala*) which are new to aviculture.

Further notes held over till next month owing to lack of space.

British Bird Calendar.

Brief notes on Migration Movements, rare visitants, uncommon nesting occurrences and general field notes for this calendar should reach the Hon. Editor not later than the 28th of each month. The co-operation of all is solicited.

March 11.—Herons been incubating about a week.
„ 22.—A Nest of Young Thrushes already flown.
J. S. R., Leadenham, 18/5/'14.

April 10.—Saw Chimney Swallow.
„ 12.—Heard Willow Warbler.
„ 13.—Heard Nightingale.
„ 14.—Heard Chiffchaff.
„ 15.—Heard Cuckoo; saw several Blackcaps in the New Forest.
„ 24.—Heard Grasshopper Warbler.
J. W., Ashley, Hants., 4/5/'14.

April 7.—Saw Robins' nest with three eggs.
„ 8.—Saw Long-tailed Tit's nest containing eggs.
„ 9.—Cole Tits began building.
„ 10.—Blue Tits had commenced building.
„ 11.—First Swallow seen by me. Magpie's nest with five eggs
„ 13.—Chiffchaffs and Willow Wrens have arrived. Linnets began building.
„ 15.—Bramblings and Sand Martins seen.
„ 17.—Saw a Redstart, also some Fieldfares.
J. S. R., Leadenham, 18/5/'14.

May 5.– Nightjar heard.
„ 6.—Saw two Swifts.
„ 12.—Heard the Turtle Dove.
J. W. Ashley, Hants., 4/5/'14.

May 13.—A Bernicle Goose visited the water in the grounds and remained two days.
J. S. R. Leadenham, 23/5/'14.

of Waders probably consisted of Ruffs and Reeves.

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Correspondence.

IS THE CUCKOO LESS COMMON?

Sir,—Is it that the Cuckoo is less frequently heard generally, or is it only my observation locally? Every year I hear it less and less; it used to be singing all day long, and most of the night, and now there are many days I never hear it at all. It appears to me to arrive much later, too. Twice in my life I have heard it on April 6th, only twice, but one always looks for it soon after then; this year not until the 17th, and none too frequently since, I am sorry to say. Years ago ' the Cuckoo's Mate," the Wryneck too, as early and as frequently, now never at all; and yet the place is no more built over than it was twenty years ago. The same applies to the Nightingale, which I used to hear around my home every spring, but less and less frequently, and now never at all, and yet the place is no more built over than it was twenty years ago. Is it that all these dear birds are scarcer in the land—destroyed in migration perhaps, for surely no one would shoot these things—or is it only my unfortunate local observation?

(Mrs.) E. A. H. HARTLEY.

Hastings.
May 10th, 1914.

SOME NOTES OF THE BIRDS OF THE BRITISH SOLOMON ISLANDS.

Sir,—A short time ago, when writing to my brother in the Soloman Islands, I asked him to tell me something about the native birds. His answer interested me very much, and I think it may interest other members of F.B.C., I am therefore giving a copy of his letter:—

" As regards the birds of this Island (Ysabel); the most " common of all is the pure white Cockatoo [most probably " Ducorps'.—Ed.]. There are hundreds of them. There are a lot " of other Cockatoos, green and yellow, red and green and yellow, etc., " and all combinations of these colours. The prettiest of them all " is a grey one, with a rose coloured breast, and green under the " the wings. The most curious of them is a small one, which when " full-sized is only about $2\frac{1}{2}$ inches long. You very often find them " right in the middle of a white-ant's nest., I had one of them in a " box, which I was trying to keep, but it would not eat. They will " not live in captivity. All the others make very good pets and " will talk well." [The details are not sufficient to recognise species, the bright coloured ones are probably Lories, Lorikeets, or Eclectus Parrots of which *Eos cardinalis, Lorius chlorocercus, Trichoglossus massena, Charmosyna margaritae,* and *Eclectus pectoralis* are found in the Solomon Islands. The small species are evidently referable to *Nasiterna,* of which *finschi* ($4\frac{3}{8}$ inches), *aolae* (3.9 inches) and *pusio* ($3\frac{1}{4}$ inches), are found in the Solomons.—Ed.].

" One of the most curious birds is the ' Megapode ' or Brush " Turkey. It buries its eggs deep in the sand, which acts as an in- " cubator. The young are hatched, fully fledged and can run like a " greyhound, and fly as soon as they leave the eggs. They lay mostly " on the small coral atholls which lie off the coast."

" We also have the Teal-duck, of which I have had many a " good feed. The other asset to the larder is the pigeon. There are " two kinds; one lives in the Mangroves and does not go far in-land, " both male and female are a light grey; the other is the Bush-pigeon, " which is darker in colour and has a big red lump on his nose. " There is another Pigeon, which I almost forgot as he is so rare, " the ' Bronze-wing ' we call him—he is only half the size of the "other two; grey with bronze wing. Another very common bird "is the 'bina' (local name), he is a sort of Hornbill, black and "white, with an enormous bill. I have a young one, which I am "going to keep as a pet. At present he is about the size of a "bantam hen, and has not a sign of a feather on him, but a mouth "capacity like a coal shute. He eats about as much as two niggers "and one white man combined (*i.e.*)=2 and one-tenth niggers). He is "a provident sort of a bird, and when the nuts are ripe lays in "a supply to last him through. My cook assures me that if I "hang up a bag near my bird's box, he will fill it during the nut "season—this is an unauthenticated piece of natural history."

"On this island (Ysabel) we have a Grey Crow exactly like "the 'Fen-crow' (Hooded Crow), it seems quite like home to hear "them cawing; it is only found on this island."

"There are also Bronze-wing Plovers, Snipe and other long-"legged Snipe-like birds. We have a water-fowl just like the New "Zealand 'Pokeha,' that big blue bird of which you have one stuffed."*

"The bird that the natives like best is the 'Delama,' a "big Black Albatross; they use models of him on their canoes, and "also cut out figures of him in mother-of-pearl, with which they "inlay the prows of their canoes most beautifully."

"There are three kinds of Hawks: Sparrow and Eagle Hawks "similar to the English ones, and a Fish-Hawk which is the prettiest "of them all. He is copper-coloured with a white breast, he also "catches snakes, etc., on shore and will dive into the water after "fish. I saw a big fight between one of them and a big snake. "He had his talons in the snake's body and the snake seemed to have "hold of him. I did not see the end of the fight, unfortunately, as "they both fell into the bush some way off and we could not follow."

"There are very few small birds; one, however, like the "Water Wagtail in shape, and another rather like a black Starling, "and these are about the only ones you see. We have a Martin "just like the one at home, black with a copper-coloured throat. "With the exception of the Cockatoos all the birds have very dull "plumage."

I have no doubt that many of the birds my brother mentions are familiar to a good number of the members of the Club, but I hope his notes may prove interesting to most. I have asked him to let me know how he gets on with the young Hornbill.

R. E. P. GORRINGE.

◆

The Club Dinner.

This was held at the Holborn Restaurant on Thursday, May 21st. Though our numbers were not in any sense large, it proved a most interesting gathering to those present, among whom were:—Major B. R. Horsbrugh, Mrs. E. A. Hartley, Mrs. Stoney; Misses Lucas, Knobel and Clare; Drs. N. S. Lucas and L. Lovell-Keays; and Messrs. C. Dell, H. Goodchild, W. T. Rogers, S. Williams, and W. T. Page.

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* The New Zealand Coot.

Major Horsbrugh presided and subsequently spoke on the conditions of the importation of birds, and urged the necessity of some restriction being placed on the manner in which some of the common species were sent over and handled on arrival.

Dr. L. Lovell-Keays moved the toast of the Foreign Bird Club, and also spoke on the need of careful tabulation of aviary episodes and our experiences in the keeping of birds, especially as regards the more difficult and rarer species; he also reviewed the question of boiled *versus* service water and his testimony was in favour of the latter.

Mr. W. T. Page responded to the toast of the "Club," stating that the present standing of the club was due to the co-operation of Mr. S. Williams, our hard-working secretary and treasurer, and to the various committees, particularly to Mr. Rogers, who organised such functions as the present, and he feared the response was barely adequate to the labour involved; he, personally, believed that success would be even greater. if members took a greater personal interest in the club, its Magazine and various functions. Mr. Page also fully endorsed the Chairman's remarks as to the need for the regulation of bird importation and dealing generally. He also expressed the opinion that the use of boiled water was only a temporary advantage at most, *viz.*, for a short period immediately following importation.

Dr. N. S Lucas spoke on pathological studies in birds, urging upon those present to make their own *Post Mortem* examinations, and threw out some very helpful hints upon the matter. He also gave some of his impressions as a result of *post mortem* examinations of birds at the Zoo, particularly stating that nephritis in its acute or chronic form is very generally met with, but very rarely mentioned in press reports.

Mr. S. Williams made a few interesting remarks about his Weavers and Whydahs in which groups he specialises; and also spoke of the progress of the club, growth being continuous, our numerical strength being over 420.

The various points raised led to some discussion, in which Messrs. S. Williams, W. T. Rogers, and W. T. Page took part, the general opinion being that climatic conditions, producing chill and its attendant evils, was the main cause of bird ailments, and the change of water a secondary matter.

The evening was greatly enjoyed by all present. The proceedings were brought to a close by votes of thanks to Major Horsbrugh for presiding, and to Mr. Rogers for making the arrangements. W. T. ROGERS.

[If we may be permitted a footnote, we may state the interest in the gathering is rather understated above, and, we think, the proceedings might well be epitomised somewhat as follows :—

Need to study "Cause and Effect."

The most practical aviculturists are those who have seen much of failure and disappointment.

There are many who scarcely get beyond the A of the Avicultural Alphabet, because they fail to note "Cause and Effect."

Those who learn the lessons which failure teaches, make failure the keystone to success and practical knowledge.

We trust that next year, there will be a larger number present to share and increase the pleasure and interest.—Ed.]

◆

Post Mortem Reports.

The conditions upon which these will be made by Mr. Hy. Gray, M.R.C.V.S, 23, Upper Phillimore Place, Kensington, W., are as follows :

(1) The birds must be sent *immediately* after death.

(2) They *must* be packed in a box.

(3) *The letter accompanying them must* NOT *be placed in the box along with the bird.*

(N.B.—Unless the above conditions are complied with the packages will be destroyed without examination).

(4) The letter must detail *as far as possible* all particulars as to—

(*a*) Date of death.
(*b*) Length of illness.
(*d*) Symptoms of illness.
(*d*) Lodgment and feeding of birds, and
(*e*) Especially as to whether egg food or inga seed has been given.

(5) The work will be done gratuitously, and a report published in "Bird Notes," *but under no circumstances what-*

ever will a report be sent by post unless a fee of 2s. 6d. *accompanies the letter and bird.* Pressure of work compels Mr. Gray to make this an invariable rule, and it applies to all Members, whether they are personally acquainted with him or not.

GOLDEN PHEASANT (♀). (Arrived without letter). Cause of death was no doubt from coccidiosis, as there were innumerable coccidia present in the caeca.

COMMON BUNTING (♀). (M. R. Tomlinson, Midlothian). Cause of death, cerebral apoplexy.

CANARY (♀). (Miss Muriel Maxwell Jackson, Harrogate). Cause of death, peritonitis, resulting from rupture of the oviduct.

FIREFINCH (♀). (Mrs. D. Longden, Swansea). Cause of death, pneumonia. The ovary was active.

MONTEZUMA QUAIL (♀). (J. L. Grossmith, Bickley). The cause of death was bird-fever. The liver and spleen were crammed with yellowish nodules, resembling the tubercles of tuberculosis. The cock bird arriving a few days later, had similar lesions.

WAXWING. (W. E. Teschemaker, Teignmouth). The bird was alive with maggots when it arrived.

GOLDFINCH. (Geo. S. Freeland, Tonbridge). Death was due to pneumonia.

PURPLE SUGAR-BIRD (♂). (Peter Arnott, Alloa). Cause of death, pneumonia.

YELLOW BUDGERIGAR (♀). (F. W. Bull, Sutton). Death was due to sarcoma of kidney.

BLACKCHEEK LOVEBIRD (♀). (Mrs. E. Travers, Stourbridge). Cause of death, pneumonia.

CORDON BLEU (♂). (G. E. Haggie, Oxford). Cause of death, pneumonia.

Answered by Post:—Capt. Reeve, A. Ezra, Lady Kathleen Pilkington, Geo. Scott Freeland.

H. GRAY, M.R.C.V.S.

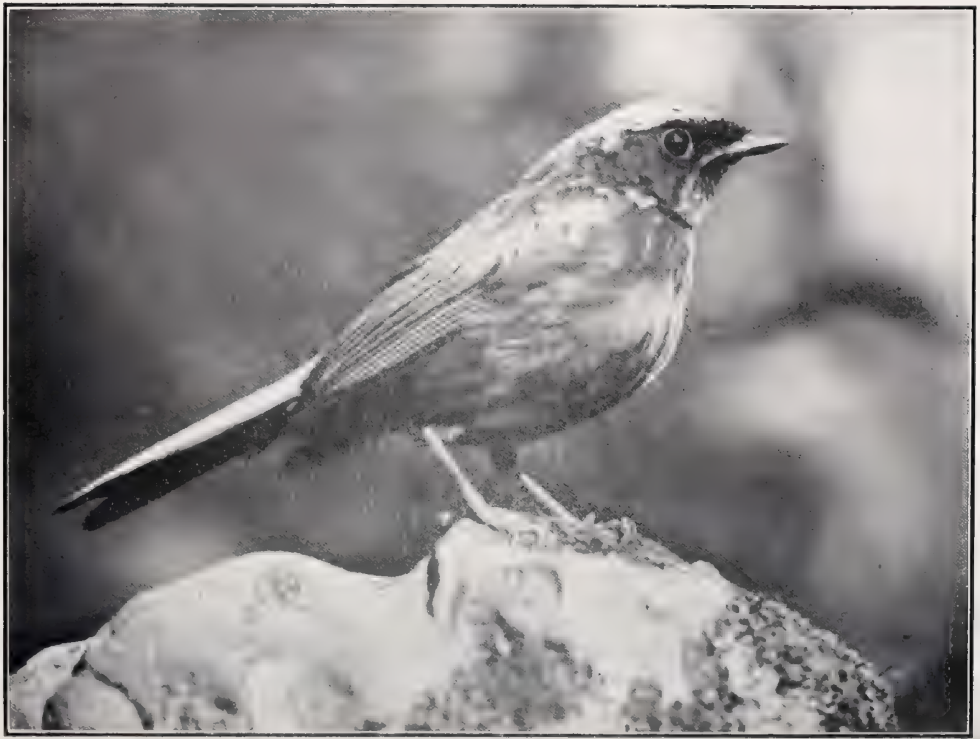
◆

Errata.

Page 145, line 21, for "anteria" read *anterior*.

Page 145, line 21, for "proteria" read *proterior*.

Page 167, line 7, from "only being seen" delete *only*.



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BIRD NOTES:

THE

JOURNAL OF THE FOREIGN BIRD CLUB

The Rufous-bellied Niltava *(Niltava sundava)* Hodgs

BY HUGH WHISTLER, I.P., M.B.O.U.

This beautiful species has lately been mentioned on two or three occasions in our magazine, so members may care for a short note on the species in its wild state. *Niltava sundava* is common in the Murree Hills, N.W. Himalayas, at the altitude of about 7,000 feet (but how much higher or lower I do not know) and is met with in heavy jungle, where it frequents the undergrowth. It usually perches only a foot or two above the ground and is inclined to be shy. In the jungle the bright tints do not catch one's eye, the cock merely appearing as a dark bird with rufous underparts.

I have only met the bird during the breeding season, and have usually had my attention drawn to it by the anxious long-drawn squeak which is uttered at intervals when one is in the neighbourhood of the nest. The cock is then seen sitting still on a branch near by, anxiously regarding the intruder; when the nest appears in danger a harsh and grating alarm note is uttered and the tail occasionally "flirted" and spread. While one is actually engaged in examining the nest both birds come very close and are then very bold.

I have taken only two nests: the first was on the 30th May, 1911, when I took four slightly incubated eggs from a hollow portion of the trunk of a small tree. The nest was a cup of moss lined with black roots and was placed only a few inches above the ground: the hollow in which the nest was placed was screened by a tangle of bushes growing over a small stream bed, at the extreme edge of which stood the tree.

The second nest was found a few days later on the 3rd June: it contained four slightly incubated eggs. The nest was a cup composed of moss and the like, lined with the black stems and roots of maidenhair fern: it was built in a hollow on the face of a bank overgrown by maidenhair, and the bank was itself sheltered by thick overhanging boughs.

It is worthy of note that this type of moss and fern-stem nest seems fairly constant, as it has been described by many observers.

The measurements of seven of the above eggs yield the following results: Length 20.9—21.6 mm.; breadth 16.1—16.6 m.m.; average measurement 21.2 × 16.3 mm.

The egg is rather reminiscent of that of the English Robin. It is pale reddish buff, very faintly freckled, and mottled throughout with a sort of dingy pink which is most apparent towards the large end.

Some newly-fledged young birds seen in company with their parents were speckled in plumage and very similar in appearance (at a short distance) to young Robins.

These Niltavas do not appear to be migratory; for although I have collected for two winters at the base of the hills I have not met with a single specimen, in places where many stragglers from the mountains are to be met from December to March.

◆

My Weavers and Whydahs.

By Sidney Williams, F.Z.S.

(Continued from page 148).

Another thing which may also help the colour to become richer is a plentiful supply of greenfood: lettuce, chickweed, dandelion and groundsel I give freely; also any kind of flowering grass. It is quite astonishing how much these birds can eat.

My staple food consists of canary, white and Indian millet seeds, and whole groats. I also give them about a handful of the following mixture: hemp, niger, linseed, and teasel, which does not average much per bird, when there are forty birds in the aviary.

Some are very keen on breeding birds which have never reproduced their kind, in captivity, in England before

—a large field is open to them with the Weaver-group. Judging by the accounts of the past few seasons, they do not appear to be so difficult to breed. The following species have been bred in this country:

Black-faced Weaver (*Hyphantornis velatus*)
Black-headed Weaver (*H. melanocephalus*).
Rufous-necked Weaver (*H. cucullatus*).
Grenadier Weaver (*Euplectes oryx*).
Napoleon Weaver (*Pyromelana afra*).
Orange Weaver (*P. franciscana*).
Red-billed Weaver (*Quelea quelea*).

I am indebted to our Editor's Book "Species which have Reared Young," for the above records.

I mentioned in the May issue that when in colour the cock Weavers seem to spend most of their time weaving their wonderful nests. When they are in earnest and mean breeding, the structure is much better finished off and of a more substantial character. The hen appears to do very little until the nest is built and then she lines it with any soft material that happens to be at hand: paper which she tears in pieces, feathers and none too particular where they come from either! also moss out of the ordinary penny bags of nest material which you buy at the shops.

Last year I had a mixture of good and bad luck: fortunate in having hatched out four Rufous-necked Weavers and five hybrid Senegal × Rufous-necked Weavers, and unfortunate in that none lived more than fifteen days. Some were nearly fledged and others only five days old when they were found lying under the nests on the ground. Two or three bore marks of violence, but the others showed no marks of external injury. This was a great disappointment, as I had my eye on a medal for the hybrids. Incubation lasted fourteen days, the eggs were hedge-accentor-blue and about two thirds the size of a blackbird's. The hen only fed the young as far as I know. Both the Rufous-necked hen and the Senegal would leave their nests as soon as I entered the aviary in the morning, and again in the evening, waiting on the perch until I got the mealworm tin. Then in turn I threw them mealworms, which they caught and took to their family in the nest. This shows how tame my birds are. It is therefore all the more astonishing that being so tame they did not look better after their young.

Later in the year (September) when I was away on my holiday, two Short-winged Weavers (*Hyphantornis brachypterus*) were successfully reared, but until I caught my birds up at the end of October I never noticed them. It is therefore impossible to give any nesting details concerning them. Now (June 7th) they are just showing a little change, and one looks like developing a mask. I find some of the young birds take quite two years before they come into *full* colour.

During the autumn of 1912 I purchased two Weavers about the size of the Black-headed, but of a greyish-green colour all over, and, the eye, unlike that of the Black-headed which is red, was quite light. After having them for nearly two years one is coming into colour and promises to be *H. melanocephalus*. The eye is changing colour also, but I will refer back to this later on.

To be continued.

◆

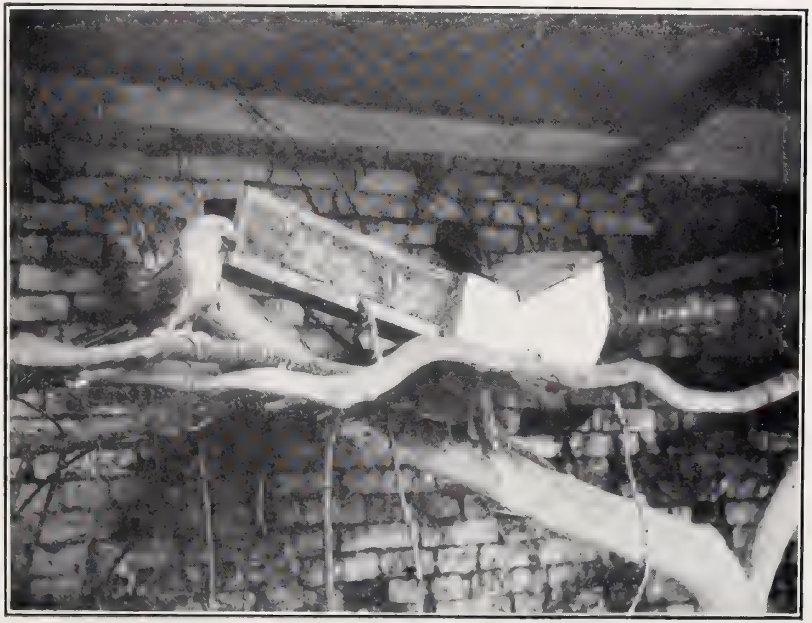
Rearing of Hybrid Greenfinch *(Ligurinus chloris)* x Sikhim Siskin *(Chrysomitris tibetana).*

By Wm. Shore Baily.

Early in May I noticed my hen Sikhim Siskin (*Chrysomitris tibetana*) carrying nesting material. As I was unable to find a mate of her own species, I turned in with her a cock English Greenfinch. Owing probably to the persecutions of some large Weavers (*Hyphantornis abyssinicus* and *H. cucullatus*) she elected to use a coco-nut husk for a breeding site. She lined this with a few feathers, and deposited therein three eggs of a pale blue colour, with a few black spots, principally at the larger end. These she incubated fourteen days. Three young were hatched, and these left the nest after eighteen days. Two fell victims to the Weavers, but the other is now a strong bird and capable of looking after itself. In colour it is grey, with streaky markings on the breast, as in our young Robin. The wings and tail alone show traces of its parentage, the basal parts of both flight and tail feathers being

Photo, W. Shore Baily.

Nest and Eggs of Greenfinch x Himalayan Siskin.



Photo, W. Shore Baily.

The Banjo Nest-Box.

yellow; this is particularly noticeable when the bird is flying. The father I have never seen feeding the young either in the nest, or since they have left it, although I used sometimes to see him in its vicinity. On several occasions I saw a pair of Cuba Finches feeding them whilst in the nest. These little Finches also slept with them for the last week they spent in the nest and will, I think, now utilise it for bringing up a brood of their own little ones. The young birds were raised entirely on seed, hemp being taken in preference. If the surviving young one meets with no casualty, and lives to change into adult plumage, a full description shall be sent later.

◆

The Breeding of the Alexandrine Parrakeets.

(Palaeornis alexandri).

BY WM. SHORE BAILY.

I am sending a few notes on the nesting of my Alexandrines. It is too well known a species to call for any lengthy description and I shall merely give the details of the nesting episode.

One of my Banjo nesting-boxes was chosen, which are more practical than handsome, but the main thing is the birds approve of them.

As will be seen, the entrance is by a square sloping tube, leading to the nest chamber, which has a concave bottom and a hinged lid (top) for the purposes of examination, etc. In the photo the hen bird is seen at the entrance of the nest, with one of her progeny on the top of it.

The hen incubated for twenty-four days, and the young were in the nest just two months.

There was a great stir in the aviary when the first young one left the nest; I found it clinging to the wire-netting, with the father on one side shouting: "Hullo Polly," and the mother on the other whispering "Pretty dear"—"Pretty dear." A most amusing episode, especially as the hen had been in the aviary over a year, during which time she had never been heard to utter a word.

The young were raised on a seed mixture of: Canary, millet, hemp and oats; bread and milk once a day, and lettuce occasionally.

The young (three) Alexandrines are much less wild than Rosellas at the same age, and are very attractive birds.

In plumage they are similar to the hen bird, but, I think, I can see traces of the dark collar as in the male bird.

◆

Breeding of the Mealy Rosella.

By the Rev. G. H. Raynor, M.A.

I am the fortunate possessor of an exceptionally fine pair of *Platycercus pallidiceps*, which I consider one of the most beautiful and charming of Australian Broad-tails. They have now been nearly two years in my possession, and have always lived out of doors. For the last fifteen months they have occupied, together with Budgerigars, my spacious Parrakeet Aviary, which faces S. and W., and has a large cosy shelter. Here, in a largish-sized barrel, the hen last year laid three clutches of three eggs each, but only hatched one young one. This died in about a week's time, when the feathers were just showing blue (see "B.N." 1913, p. 315). On two occasions the hen was very ill, suffering apparently from egg-binding, and it was only by taking her indoors and nursing her assiduously before the kitchen fire that I was able to save her life.

This year she has not ailed at all, and is in splendid condition. I don't quite know when she went to nest, but it must have been some three weeks before May 8th, when she hatched. I didn't dare to look into her barrel till the 22nd, when I found it to contain two barren eggs and a strong youngster. For the next three weeks the mother kept a great deal to the barrel, being fed by her husband, although she was off more frequently towards the end of the period. Matters culminated on the 11th of June, when I found the youngster on the floor of the shelter, but how he got there I don't quite know. On the same day he, or she, was out in the shelter, and had climbed up some dead branches three or four feet from the ground. His feathers, though covered with soft down, seemed to be fully grown, but he has only within the last few days indulged in a flight from branch to branch. He generally sits on the top of the dead trunk (in the centre of the flight) which is nearly 6ft. high, and calls repeatedly in a soft whistle for his parents who feed him from time to time with disgorged food. He is about three-quarters the size of the full-grown birds, and has similar but rather duller plumage, possessing, in addition some striated reddish-orange markings on the head. He amuses himself by biting bark from the dead trees and tried his beak upon some cuttlefish to-day. His mother is now in her barrel, being apparently about to lay once more. Her husband is a very charming bird and is always ready to partake of the various sorts of green food which I offer him.—(Hazeleigh, June 19th, 1914).

Some Experiences of Cockatoos.

By the Marquis of Tavistock.

(*Continued from page* 191).

Meanwhile the old pair were staying well, often flying two or three miles or more from home, but always returning regularly to feed. All was satisfactory until the middle of February, when to my great surprise and regret, the hen was one day brought to me dead, the *post mortem* showing that a soft-shelled egg had brought about her untimely end. The cock seemed much upset by his loss, and in order to console him and prevent him from straying in search of his departed wife, I got him another mate. The latter was, however, not in good enough plumage to turn out altogether, and he was only able to see her on fine days an arrangement which annoyed him considerably and proved in the end the unforeseen cause of his death. One day in March he failed to make his customary appearance on the feeding tray in the early morning, and many weeks later the discovery of his shrivelled corpse in a disused chimney-stack showed that the poor bird's persistent efforts to join his new mate, in the interior of the house, had brought on him a miserable end by slow starvation.

The following summer I bought four more Roseates, and together with young "Cocky," they were turned with clipped wings into the quadrangle. Two of them, both old birds and wild, flew away as soon as their wings had grown, one ultimately taking up her abode at a farm in another part of the county where she lived at liberty for nearly a year. A third, a young cock, stayed well until the mysterious form of enteritis, which proved fatal to the old Gang-gang, carried him off in late October and, not long afterwards the fourth imported bird which had paired with "Cocky" and was staying well met with the same fate. To replace her I obtained another hen, which, although coming from the somewhat doubtful company generally afforded by the members of a travelling circus, proved a charming bird, absolutely gentle, and, until educated by her companions, nearly or quite ignorant of the art of screaming. She took to "Cocky" at once, but as she fell ill when the weather became bad, I shut them both up for the winter.

Some time later I obtained two new cock Roseates; one was a timid, ragged-looking bird whose plumage never seemed to improve and whom I held in small esteem, and the other a very aged specimen which did not appear in the best of health. The latter spent most of his time asleep, and, if he had not had a number of curious red feathers in his wings, I think I should have adopted the more prudent course of putting an end to his career. He was tame and liked having his head scratched, but if allowed to step on to one's wrist, as he was rather anxious to do, he would at once start biting savagely without the slightest provocation. Though full-winged, he was quite unable to fly.

When spring came round "Cocky" was again released and I shall never forget his joy and excitement at being once more able to use his wings and enjoy the luxury of a rain bath. The same day I let out a hen which had arrived a few weeks before—a tame bird with a broken tail—which was by way of having come from an outdoor aviary, and was therefore better able to stand the cold than the circus hen which I did not care to risk out of doors until the weather grew a little more settled. "Cocky" welcomed her at first—he always accorded an effusive greeting to every newcomer of either sex—but later in the day she managed to lose him, and being chased by Rooks grew frightened and flew out into the park. "Cocky" was far too busy enjoying himself in a storm of rain to trouble to go and look for her, and, as every flight she took carried her further from home, it began to look as though we might end by losing her altogether. In this emergency I decided, in spite of the coldness of the day and the ragged condition of his plumage, that the only thing to be done was to use the rough cock as a decoy for the recapture of the wanderer. He responded nobly to the occasion, and by his incessant yells ultimately induced her to leave her perch in a lofty beech tree and enter an empty cage beside his own, when she was carried home in triumph.

A few days later I gave the ragged bird his liberty, and for some weeks the worn condition of his flight feathers prevented him from going any distance. "Cocky" was just as pleased to see him as he had been to see the hen, and in a very short time the two were preening each other's feathers in the most affectionate manner, although "Cocky" was seldom able to resist the temptation to give an occasional sly nip, whatever the sex of the friend which was caressing him. A Roseate, it may be remarked, seldom or never "displays." The male bird, on first meeting the lady of his choice, walks up near her and begins eating grass or pecking at the ground. She does the same until after a little while he stops and begins to preen his feathers. She follows suit and also preens herself, while he, still apparently wrapped up in his toilet, edges slowly nearer and nearer to her, a few inches at a time. Finally when they are almost touching, he reaches cautiously out and gently nibbles the top of her head, and if she accepts this in good part, and returns his caress, it usually means that they have decided to take one another for better or worse.

The next bird to go out was the circus hen, who, being more or less familiar with her surroundings, gave no trouble, and soon afterwards the stump-tailed one was again allowed freedom. I let her out in the late evening when "Cocky" and his mate were wheeling and swooping round the house in wild enjoyment of their last flight, and the ragged cock, who with considerable difficulty had at length gained the roof, was screeching his sympathy at the top of his voice. For a long time she had been frantic to join them and had even communicated some of her excitement to the sickly bird in the cage beside her. When at last the door was open and and she shot out to join her friends, some forgotten memory must have stirred the old fellow's brain, for, raising his crest and half spreading his useless wings, he exclaimed "Baby! Baby! Baby!" in hoarse and sepulchral tones. It was the first time we had heard his voice since he came to us nearly five months before! Next day, he, too, received his liberty, but the circus hen attacked him so savagely that we were compelled to shut him up again to save his life. For the rest of the year I kept him in various large aviaries, hoping that increased freedom would benefit his health, but he never improved, and when at length he died the nature of his illness and the infection which he was the means of spreading, showed that it would have been well, indeed, if I had never seen him.

In the early summer I obtained another tame cock Roseate and a hen, which were released soon after their arrival. To the former, for some reason, "Cocky" took a great dislike and made frequent but unavailing efforts to drive him away from the house. The establishment of a flock of six proved to be the high water-mark of my success. Misfortune soon set in: first the circus hen was stolen by a man living in a town which she often visited about a mile from home and not long afterwards the same wretch (as we afterwards learned) secured poor "Cocky" with the aid of a neighbour's Roseate, which he used as a decoy. "Cocky" was a sad loss, for though his pecuniary value was, of course, small, his cheerful personality and interesting history made him quite one of the most cherished members of my collection. I have always retained a hope that I may one day get him back, but I fear the chances are in reality very small indeed, the number of Roseates in captivity being so enormous; still, if any reader of "Bird Notes" *should* ever come across a male representative of Cocky's race who says in a loud (and rather vulgar) voice "Cocky! Cocky!" and "Hullo, cocky!" and whose antecedents show that he might be my lost favourite, I should be deeply grateful if he would communicate with me!

The next to go were Cocky's enemy and his mate, who apparently wandered away of their own accord. More than two years later I traced the former to his abode in a London workhouse, where, as he had become a good talker and was valued by his owner I decided to let him remain.

I was therefore left with the despised rough cock, and the stump-tailed hen, besides the aged bird already mentioned. The rough cock had changed almost beyond recognition, and after a few weeks of freedom began to look quite trim and respectable. Towards the end of April he and the hen selected as their nesting place the hollow limb of an old poplar and in due course eggs were laid and two young birds made their appearance. The final exit of the latter was hastened in a rather ludicrous manner by an inquisitive Banksian. For many days after their wings had grown they had ignored all their parents' endeavours to persuade them to fly and had remained cautiously peering out of the entrance to their home; but when the huge black apparition suddenly looked down at them from a branch only a few inches above their heads, they hesitated no longer, but launched themselves into space with all possible haste. Their parents seemed rather relieved than otherwise at the unexpected assistance they had received. Possibly they had long been threatening their disobedient children with the avian equivalent of the "bogey man," and were therefore agreeably surprised by his quite unexpected arrival. For a short time all went well with the young birds; then one fell a victim to microbic enteritis and some months later the second also vanished, having probably been carried off by the same ailment. The old pair did well until the following February, when the hen died from egg-laying troubles, exactly as her predecessor had done. There appears little doubt that this is the usual fate of hen Roseates, which attempt to breed in cold weather, and I should have done wisely to have caught her up in the late autumn and kept her confined until the return of spring. To make up for her loss I obtained another hen from the Zoological Gardens, but she brought me bad luck, for after staying for a few days she flew clean away, taking the cock with her, and I never heard of either again. It was a pity, for Roseates at liberty are most attractive birds, not very mischievous as a rule and fairly peaceable towards their weaker neighbours.

My experiments with Slender-billed (*Cacatua nasica*) and Bare-eyed (*C. gymnopis*) were attended with so little success that I did not persevere long with either. I bought a pair of Slender-bills in the summer of 1912, and let out the cock full-winged. When he had apparently settled down, I released his mate, who, though she had been very tame in her cage, quickly became shy and suspicious. The pair stayed for a few weeks and then disappeared entirely.

A fine pair of Bare-eyed Cockatoos reached me at the same time as the Slender-bills, but I had only had them a very few days when the hen suddenly died. I got another, and immediately afterwards the cock died. *Post mortem* examination showed fatty degeneration of the liver in both cases, so I stopped all hemp and sunflower (of which they had only been receiving quite a moderate quantity) and thenceforward had no more trouble. A new cock was secured and in due course was set at liberty, the hen being put out-of-doors in her cage to keep him from straying. He stayed well enough, but it was hate and not love which kept him chained to the spot, and for a time he made the most furious and persistent attempts to murder the imprisoned lady. When his rage had somewhat abated, I let her out too, and rather to my surprise he showed little inclination to attack her and soon became perfectly friendly. Both birds stayed well, but proved so fearfully destructive to the trees that I was in the end obliged to get rid of them.

Of Moluccan Rose-crested Cockatoos (*Cacatua moluccensis*) I have only possessed a single individual. He was a quaint bird, and very tame and affectionate with his human friends. He would sit on one's shoulder for several minutes as motionless as a statue and as solemn as a judge and then would suddenly open his wings, throw up his crest, strike one on the cheek with the flat of his bill and exclaim in a shrill child-like voice "Papa Wheeon"! He never got any further than these two words, although many Rose-crests become wonderful talkers. On first arrival I put the old fellow into an indoor aviary, the walls and roof of which he speedily reduced to matchwood. I then turned him out. He walked slowly to a small tree (having lost three feathers out of each wing he was firmly convinced that he could not possibly fly) and razed it to the ground. As a last resource I carried him into the quadrangle, where there was nothing but stone, grass, and some cut-winged Parrakeets. He tried the stone and found it too much for him; he tried the grass and decided it was poor game for such as he; lastly he tried the Parrakeets, and then we had to part. In his next incarnation I believe he will be a social reformer of the advanced school his destructive genius was so untiring.

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The Nesting of the Blue Sugar-bird.

(*Dacnis cayana*).

By Dr. L. Lovell-Keays, F.Z.S.

The title sounds hopeful, and, like hope, tells somewhat of a flattering tale. In reality the story is more of a tragedy, and were my birds human (to me they very nearly are!) my story would rival many of those written by the old tragedy writers in the days of the ancient Greeks. I have purposely chosen the Blue Sugar-Bird for many reasons, which will be clearer as the story unfolds itself. To begin at the beginning: In June of last year I saw two Sugar-Birds advertised and a third one for 2s. 6d. I had never kept a soft-bill, so I thought I would try my prentice hand on this poor little mite begging for a good home at the price of the modest half-crown. The bird came to hand quite fit and also quite blind in one eye. After a rest of twenty-four hours, I turned it out into my aviary with Waxbills, Grassfinches, Grey Singingfinches, Mannikins, and a Weaver or two. How perfectly charmed I was with my first soft-bill. The exquisite grace of its movements, its confiding nature, its merry little twitter, everything in fact that would exemplify the *joie de vivre*. No wonder that shortly afterwards I got another pair from Mr. Yealland for a sovereign and turned them out with my first. All these were out of colour—a kind of homogeneous sea-green. They were the best of friends and the happiest of beings. My early days in aviculture were halcyon days indeed. Birds lived as if by magic; certainly a fairy godmother had charge of my feathered pets in those days. Their diet consisted solely of milk-sop, and banana rather sparingly. I didn't worry about diet in those days. All the summer they lived well, but towards autumn I began to see that my little blind friend remained the demure little lady she always was and still is, but the two on whom the Goddess of Beauty had smiled got more blueish about the primaries. All three slept out until late November, and I verily believe would have wintered out of doors perfectly well, but on the advice of our universal and mutual friend—our Hon. Editor, I went out one night and gently caught up three tiny balls of green fluff and put them into my heated bird-room. Here they lived and played till April 12th, when the two favoured cocks showed their full dress colouration of exquisite turquoise-blue blended with a lovely soft sea-green and pencilled with pure black. So far my story is but an old-fashioned fairy story with no malevolent fairies and no evil-minded witches. This continued till about May 10th, when the hen bird would crouch on a twig, spread her wings, and call for food in imitation of a young bird. The cock birds were not slow to discern the maternal yearnings, and paid her considerable attention, but, beyond saying pretty nothings, didn't help things on very much. But the hen was determined this should be no modern marriage, and built herself a house the house being all nurseries. As her husband, for she chose one, would not help her to build a home, seemingly preferring to live a rather gay hotel-club existence, I perforce had to help her. I got some tow out of my cupboard and unravelled string, and with this the little architect built the prettiest little cradle-nest imaginable in a Retinospora, attached Gold-crest fashion to the underside of a bough; but either she or another bird didn't approve, for it was deserted and nothing further happened till May 20th, when she again started building. I used to take the tow in my hand, and she would prefer to take it from me rather than that hanging on a tree. She also had a pretty little trick of settling on my wife's head and trying to purloin some of her hair. But that blind eye seemed to bother her and she could never complete the nest, to her satisfaction, so I got a good ball of prepared cow-hair, and stuffed it in the branches of the bush. This time it was the usual cup-shaped nest. She was most grateful, and I have actually tucked in the straggling ends with her in the nest. On feeling me near she would twist round and give me a friendly little look as if to say "Hello! have you come to help"? Then when I had clumsily tucked in parts to make it more snug and safe, she would get impatient, get on the nest and mould it with body and wings. Finally horse-hair was given to her, and she wove this into a lining and did so until the chick was hatched. She spent hours weaving the cow-hair round the twigs. "What about her husband"? you ask, and well you may, for he was utterly lazy, and exactly corresponded to the golfing husband in humans. The only thing he did to distinguish himself was to chivvy the other unfortunate cock, until, one morning, I picked up the latter quite dead. Thereafter the curse of Cain rested on the house of Blue Sugarbird. On June 2nd, to my joy, I found an egg in the nest. But what an egg for such a tiny mite to lay, and a very peculiar shape, too! About twice as long as it was broad—white with largish brown spots evenly at one end. But its size suggested at least a Pekin Robin. The next day the bird began to sit and continued to do so with the greatest patience and devotion.

On June 4th, while she came off for food and exercise, I noticed a second egg similar to, but not so mis-shapen as the first. The cock bird never, as far as I could make out, fed her on the nest, but would hang about the place and roosted in the vicinity. When she came off he would feed her at times on a fly or gnat he had caught. Things went on in this way till June 11th, when I discovered one egg had gone—the mis-shapen one. However, on June 13th, on looking into the nest I saw a white little helpless lump with one or two ridiculous looking pieces of whitish down sticking on here and there like the present-day ladies' hats. Thirteen did not sound very propitious and the mark of Cain was on the father's brow. But the mother was the proudest bird at Park Lodge, and her tenderness and devotion toward her little one were marvellous to behold. She was always combing the baby's one hair, just like a human mother. From the very first she would fly to me for "something for the baby," but I fear that professional duties prevented me doing all I could wish. On the 14th the cock bird, who had not been looking well, died under the curse, and there was our hapless babe, fatherless, with only its mother to warm and feed it, and she, poor dear, blind in one eye. I gave her gentles, which she proceeded to chew up, and would swallow before she gave them to her chick, but here again I believe her blind eye was a handicap, for I don't think she could always find its wee mouth. If only the chick could have lived on love there would be a medal waiting for me, and for the little Sugar-bird, Nature's greatest and most precious gift. I studied the home-life of my little friend far more intimately than I have ever studied the home life of a mere human, and I know all I say is true. On Monday morning she flew out to me—I was later than usual as I had been detained. I gave her the asked-for gentle and while she chewed it up I went to look at the baby, but although it was warm no tiny head was uplifted to receive the proffered tit-bit, and my little friend returned to the nest to find and realise that love's labour was indeed all lost. Her fondest hopes were dashed to the ground, and in place of a joyous little twitter she gave a plaintive "tweet," as if to call back the spirit from the great unknown. I took the little chick out to look at—still quite warm. Like all soft-bills, it had no apparent crop, but looked fairly well nourished, and had certainly grown. Then impelled by a touch of nature that makes all the world kin, I replaced it in the nest. Even then my little Sugarbird friend trusted me and knew I would not harm her little one, for she flew into my hand and looked up to me for help. But help was not in my power, and I turned away sadly and sorrowfully to think it over. Why must these things be? When I returned later the mother had taken her chick away. I like to think she laid it to rest, although my reason tells me that it is rubbish. And how about my little Sugarbird? She still lives and makes me happy and I would not part with her for ten golden sovereigns, albeit she is blind in one eye.

But what is the lesson we are to learn or rather lessons? I think the point is that birds are infinitely more "human" than we give them credit for and ever so much more intelligent. Why did I fail? I didn't—it was the devoted little mother bird. Fate, the inexorable one, was against her. The loss of her eye, her mate, and my not being able to help her as I ought to have done, all militated against a successful issue. And yet I like to think that she realises that wonderful piece of philosophy which says:

> "'Tis better to have loved and lost than never to have
> loved at all."

With these few remarks I will ring the curtain down on a tragedy that would befit Euripides.

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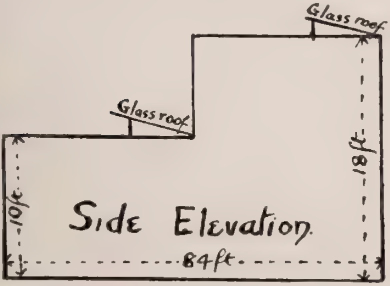
An Easter Tour Among Members' Aviaries.

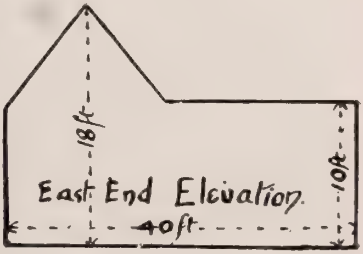
BY WESLEY T. PAGE, F.Z.S., ETC.

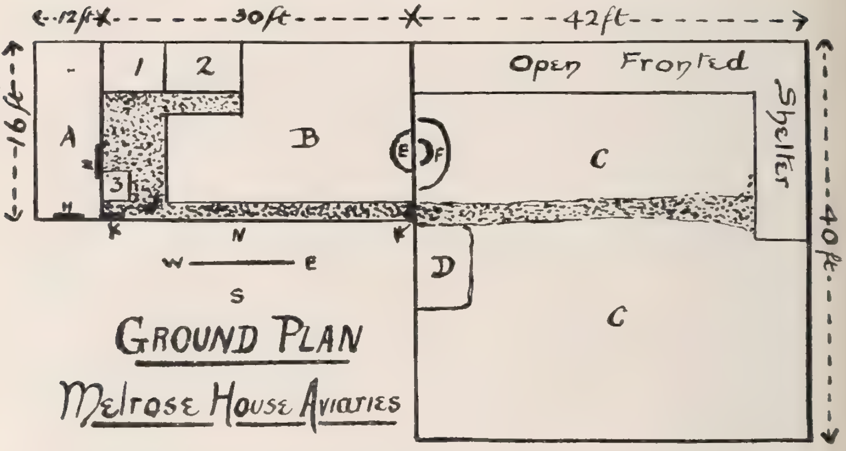
(*Continued from page* 183).

MAJOR F. JOHNSON'S AVIARIES: Melrose House, Hove, was our next call, and here Mrs. Johnson, in Major Johnson's absence, kindly entertained and showed us round the aviaries. These have already been described in "B.N.," but as there are so many new members, I give here ground plan and elevations with description, to save my pen much describing, greatly regretting that I cannot give sectional photos, for no single photo could do these fine aviaries justice.

It will be seen that the main aviary is a roomy one, covering some forty square feet, and about sixteen feet high. The roof is supported by numerous internal standards, around which ivy and other creepers picturesquely twine.







A.—Stable filled with trees, with windows at H.H.

B.—Enclosure for special birds, which must be kept separate, with fountain at E.

C.—Main aviary, with fountain and pond at F., turfed and planted with evergreens and various creepers up internal standards.

D.—Rustic Arbour in use as observation post.

K.K.—Doors for entrance and to shut off main aviary from service passage J.

Dotted areas represent gravel service passage and paths.

1. 2. 3.—Compartment enclosures for new arrivals.

The East End is wood and glass.

Except where otherwise designated the structure is of wire netting stretched on stout wood framing.

Since my last visit, from the open front portion of the aviary much of the grass has been replaced by sea-sand, the better to accommodate the numerous Waders which form so pleasing a part of this collection. The other Orders are, however, not neglected; for these there are evergreen bushes scattered here and there over the whole ground area, and numerous patches of grass make "happy hunting grounds" for birds of all Orders. The whole effect is most pleasing, especially from the vantage-ground of the rustic arbour, which forms Major Johnson's observation post; here we sat, while the birds displayed themselves in front of us, drawn hither by the seductive mealworm (dispensed by Mrs. Johnson). A most fascinating picture it made, many of the Tits, Chats, and Warblers being very tame and readily coming, even to a strange hand, for the dainty morsel.

While feasting our eyes upon the avian display and chatting about the birds with our hostess, most of the birds named in the following list passed before us:

Warblers, Accentors, Chats, Etc.: Alpine Accentor (*Accentor collaris*), Hedge Sparrow (*A. modularis*), Nightingale (*Daulias luscinia*), Garden Warbler (*Sylvia hortensis*), Sedge Warbler (*S phragmitis*), Reed Warbler (*S. arundinaceae*), Wood Warbler (*S. sylvicola*), Willow Warbler (*S. trochilus*), Icterine Warbler (*S. hippolais*), Greater Whitethroat (*S. cinerea*) Lesser Whitethroat (*S. curruca*), Blackcap (*S. atricapilla*), Stonechat (*Pratincola rubicola*), Whinchat (*P. rubetra*), Wheatear (*Saxicola œnanthe*). Redstart (*Ruticilla phoenicurus*), Black Redstart (*R. titys*), Bluethroat (*Cyanecula suecica*), Redbreast (*Erithacus rubecula*), Wren (*Troglodytes parvulus*), Gold-crested Wren (*Regulus cristatus*), Chiff-Chaff (*Phylloscopus rufus*).

Tits: Bearded (*Panurus biarmicus*), Long-tailed (*Acredula caudata*), Great (*Parus major*), Cole (*P. ater*), Marsh (*P. palustris*), Crested (*P. cristatus*), and Blue (*P. caeruleus*).

Flycatchers: Spotted (*Muscicapa grisola*), and Pied (*M. atricapilla*).

Thrushes, Etc.: Redwing (*Turdus iliacus*), Thrush (*T. musicus*), Missel Thrush (*T. viscivorus*), Fieldfare (*T. pilaris*), Blackbird (*Merula merula*) and Ring Ouzel (*M. torquata*), Dipper (*Cinclus aquaticus*).

Wagtails Pied (*Motacilla lugubris*). White (*M. alba*), Grey (*M. melanope*), Yellow (*M. raii*), and Blue-headed (*M. flava*).

Pipits: Tree (*Anthus trivialis*), Meadow (*A. pratensis*), and Rock (*A. obscurus*).

Larks Shore (*Otocorys alpestris*) Sky (*Alauda arvensis*) and Wood (*A. arborea*).

Finches Greenfinch (*Ligurinus chloris*), Hawfinch (*Coccothraustes vulgaris*), Goldfinch (*Carduelis elegans*), Siskin (*Chrysomitris spinus*), Serin (*Serinus serinus*), House Sparrow (*Passer domesticus*); Sparrow (*Passer domesticus*), Tree Sparrow (*P. montanus*), Tree Sparrow (*P. montanus*), Chaffinch (*Fringilla coelebs*), Brambling (*F. montifringilla*), Linnet (*Linota cannabina*), Mealy Redpoll (*L. linaria*), Lesser Redpoll (*L. rufescens*), Twite (*L. flavirostris*), Bullfinch (*Pyrrhula europaea*), Crossbill (*Loxia curvirostris*), and Pine Grosbeak (*Loxia enucleator*).

Buntings. Corn (*Emberiza miliaria*). Yellow (*E. citrinella*), Cirl (*E. cirlus*), Ortolan (*E. hortulana*), Meadow (*E. cioides*), Reed (*E. schoeniclus*), *Lapland* (*E. lapponica*), Black-headed (*E. melanocephala*), and Snow (*Plectrophenax nivalis*).

Starlings: Common (*Sturnus vulgaris*), Rose-coloured Pastor (*Pastor roseus*).

WOODPECKERS: Green (*Gecinus viridis*), Great-Spotted (*Dendrocopus major*), Lesser Spotted Woodpecker (*D. minor*).

ETCETERA Nuthatch (*Sitta caesia*), Waxwing (*Ampelis garrulus*) Swallow, (*Hirundo rustica*), Nutcracker (*Nucifraga caryocatactes*), Roller (*Coracias garrula*), Bee-eater (*Merops apiaster*), Chough (*Corvus* graculus*), Raven (*C. cornix*), Crow (*C. corone*), Rook (*C. frugilegus*), Jackdaw (*C. monedula*), Jay (*C. glandarius*), Magpie (*Pica caudata*), Wryneck (*Iunx torquilla*), Tree Creeper (*Certhia familiaris*), Wall Creeper (*Tichodroma muraria*), Cuckoo (*Cuculus canorus*), Golden Oriole (*Oriolus galbula*), and Turtle Dove (*Columba turtur*).

WADERS Teal (*Nettion crecca*), Land Rail (*Crex pratensis*), Water-Rail (*Rallus aquaticus*), Water-Hen (*Gallinula chloropus*), Stone Curlew (*Oedicnemus scolopax*), Golden Plover (*Charadrius pluvialis*), Grey Plover (*Squatarola helvetica*), Green Plover (*Vanellus cristatus*), Dottrell (*Eudromias morinellus*), Ringed Plover (*Aegialitis hiaticola*), Turnstone (*Strepsilas interpres*), Oyster Catcher (*Haematopus ostralegus*), Avocet (*Recurvirostra avocetta*), Dunlin (*Tringa alpina*), Curlew-Sandpiper (*Tringa subarquata*), Knot (*T. canutus*), Sanderling (*Calidris arenaria*), Ruff (*Machetes pugnax*), Sandpiper (*Totanus hypoleucus*), Wood-Sandpiper (*T. glareola*), Redshank (*T. calidris*), Bar-tailed Godwit (*Limosa lapponica*), Black-tailed Godwit (*L. belgica*), Curlew (*Numenius arquata*), Black-headed Gull (*Larus ridibundus*), Horned Grebe (*Podiceps auritus*), etc.

There can only be one word for such a complete series of British Birds; it is UNIQUE and in the setting of the lovely aviary they occupy, were a sight long to be remembered. Especially charming were the Warblers and Wheatears; of the latter there were three or four species or local races.

While this is essentially a collection of British Birds, living with them are many aliens from other climes—Budgerigars, Grassfinches, Mannikins, Finches, etc., our old friend the Zebra Finch being very noticeable, in all his impudent, impertinent, yet charming personality.

We could not linger, as we were due in the Isle of Wight that night, so reluctantly said good-bye to our hostess, and left for Southsea and Ryde.

MR. WILLFORD'S AVIARIES: It is impossible to give anything like a description of these aviaries in an account of this character, but I repeat here Mr. Willford's photo of a part of them—which will indicate to new readers something of their extent and completeness not only was their

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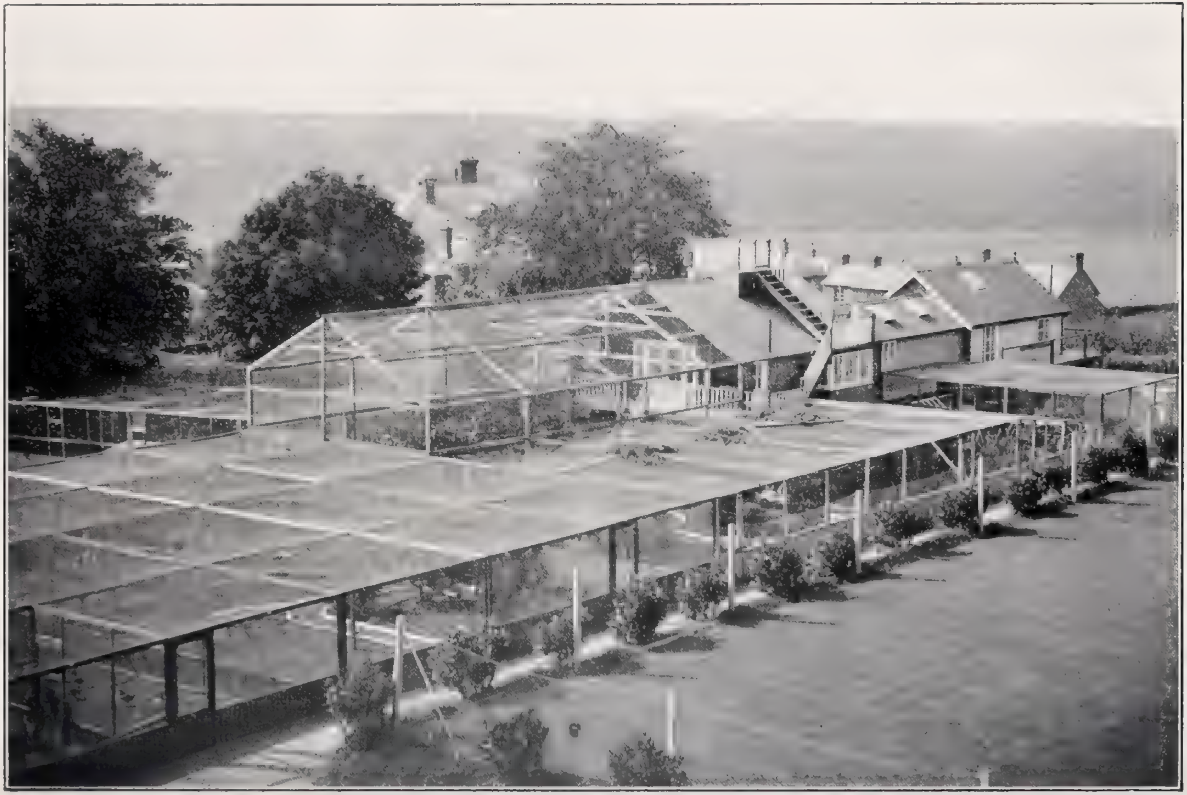
* *Pyrrhocorax.*



Bird's Eye View of a portion of the Havenstreet Aviaries. *Photo, H. Willford.*

owner away, but the aviaries were practically untenanted, for of late Mr. Willford has been so busy photographing our native birds in their wild haunts—upon their native heath—that he has had no time for bird-keeping, and consequently of all the huge collection that at one time peopled these aviaries with activity, beauty, and interest, only a few Pheasants and Waders remained. We spent the morning of Easter-Monday looking through them; to the writer almost every step was fraught with memories of the past; this tree, that bush, that tangle of bindweed and briar, and the grassy banks, all spoke eloquently of some episode of the life of the former feathered occupants, who had lived, yes, fought life's battle, reproduced their kind, and departed for the great unknown, within the precincts of what must have been a paradise for them. In imagination I was able to re-people it with its former inhabitants, and recall many episodes as the remains of nest after nest were seen in some of the trees and bushes; but, people it as one may with its past glory, it was but a ghostly glory, and what a waste it seemed, that over an acre under wire should have gone almost unused for nearly two years—it was almost like exploring a deserted city. Mr. Haggie, who had been feasting on construction and equipment details, storing up knowledge for future use, and admiring the wealth of wild natural cover, which is a feature of these extensive aviaries, said at last, "Such aviaries make one envious, yet how like it is to exploring an empty house"! Fortunately the aviaries have not been allowed to fall into ruin, and, I believe, Mr. Wilford is to mend his ways, and the aviaries are to be re-stocked next season. Well, we must hope that it will be so, for there is scarcely any living aviculturist who has such extensive accommodation for any and every group of birds he chooses to keep—a reference to the past six volumes of "B.N." will indicate that my lament is restrained, and the aviaries themselves are done bare justice to. I fear their owner does not appreciate them as he ought, though as a result of photographic zeal and skill, many beautiful pictures of bird-life have embellished our pages.

In the afternoon we went over to Binstead and inspected Mr. Yealland's stock, which we found to be rather low, but more was expected in the course of the week. We saw, either in the out-door aviary, shed, or in cages in the house, some nice young Grey Parrots, Melba and Red-headed Finches, Grassfinches, and two Grey-headed Buntings, also some of the Small Ornamental Finches.

Tuesday morning found us in the New Forest district, our first call being at Beaulieu.

DR. GOSSE'S AVIARIES: These were illustrated in "B.N." Vol. III., N.S., page 145, and I must refer my readers to the account given there.

The aviaries are four in number, all in one range, and with inter-communication. The sheds are at the back, and the flight framing is rustic-woodwork. Except the Parrakeet aviary, all are nicely planted with Common and Portugal Laurel, Aucuba, Euonymus, Box, Hops, Privet, Bramble, Helianthus, Ribbon Grass, etc.; thus there is plenty of natural cover, and though a very mixed series is kept all agree very well together.

The following species have all successfully reared young, some for several years in succession: Cutthroats, Zebra Finches, Budgerigars, Madagascar Lovebirds, Passerine and Red-rump Parrakeets, Diamond Doves, and Californian Quail.

Reed Buntings (*Emberiza schoeniclus*), nested and hatched out two young, but did not fully rear them.

For several years Budgerigars (escapes in first instance) have been established in the high trees at the back of the aviaries, which are situated near the bank of an estuary of the Solent.

We noted the following species in the various aviaries, the larger species being located with the Parrakeets, and with them are placed at the head of the list:

Red-rump Parrakeets (*Psephotus haematonotus*).
Budgerigars (*Melopsittacus undulatus*).
Madagascar Lovebirds (*Agapornis cana*).
Passerine Parrakeets (*Psittacula passerina*).
Rosy Pastor (*Pastor roseus*).
Pekin Robin (*Liothrix luteus*).
Californian Quail (*Lophortyx californicus*).
Silky Cowbird (*Molothrus bonariensis*).
Diamond Doves (*Geopelia cuneata*).
Cape Doves (*Oena capensis*).

Bronze-wing Doves (*Phaps chalcoptera*).
Malabar Mynahs (*Poliopsar malabaricus*).

There were also a good series of the "Freely Imported Species": Saffron and Zebra Finches, Silverbills, Cutthroats, various Mannikins and Weavers, Seed-eaters, Cardinals, etc.

Buntings: Yellow, Cirl, Ortolan, Reed, and a pair of a pair of Chinese or Ruddy-backed (*Emberiza rutila*); quite a nice series.

None of the birds are taken indoors during the winter months, and their vivacity and general fitness were an abundant testimony that the conditions suited them in every way, for a healthier, or, apparently, happier lot of birds we had never seen.

I had hoped to have included an account of Mrs. Turner-Turner's aviaries in this instalment, but find I must hold this over till next issue, as both my time and space are used up.

(*To be continued*).

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Birds of the Jhelum District and an Ornithological Diary from the Punjab.

By H. Whistler, I.P., M.B.O.U.

(*Continued from page* 205).

The scene of the first four months in this year's diary was laid at Jhelum in the north-west of the Punjab. Then at the end of April I, was transferred to Hissar District. Hissar is situated at the south-eastern corner of the Punjab, some three hundred odd miles from Jhelum and a hundred miles from Delhi. The district is a large one, about 5,000 square miles in area—an area which consists very largely of sand; for this part of the Punjab borders on the Bikanir desert and much of the district is desert-like in character, the jungle consisting of low thorn bushes and coarse grass growing on a sandy soil. There is, however, a certain amount of irrigation by canals, and the canal area is marked, by more fertile cultivation; the canals themselves are lined with Shisham and Kikur trees, and are good hunting grounds for the naturalist.

May is marked chiefly by the fact that a large number of birds are nesting, and there are a few signs of migration—birds left over from the main rush. But owing to my observations being made on strange ground, I have probably missed a large amount of valuable notes; it is much easier to observe the ornithology of a locality which one already knows by heart.

May 1.—A Scops-eared Owl seen sleeping on a bough in my garden ; it was quite fearless and very sleepy, refusing to move for a long time in spite of various pieces of earth which I threw up, being desirous of seeing it fly. When it did move, it was only to a bough a few yards off. Near the Bungalow is a group of large trees in which are several nests of the White-backed Vulture (*Pseudogyps bengalensis*). Some of the nests were empty, as this species is a very early breeders, but on others, birds were seen to be sitting : however, when I sent a man up to examine the tenanted nests it was found that the occupants were fully grown and feathered young birds, who refused to move for any-one : even a stick in the hands of the climber had no terrors, yet, as seen from below, these youngsters looked sufficiently developed to fly with ease. Another of the trees contained an Egyptian Vulture's nursery containing a single hard-set egg ; the nest was so large and bulky that 1 suspect it really belonged to a *Pseudogyps*. The remains of an old towel and an ox muzzle of rope formed part of the somewhat miscellaneous materials.

Finally in yet another of the trees was the small stick nest belonging to a pair of Shrikes (*Astur badius*). This contained four slightly incubated eggs.

A Red-breasted Flycatcher (*Siphia parva*), a pair of Small Minivets, (*Pericrocotus peregrinus*), and a Green Sandpiper noted.

May 2.—A common bird here is the Black Crested Mynah (*Temenuchus pagodarum*)—a sprightly and handsome bird with more agreeable notes than the other Mynahs ; in Jhelum District it occurred but rarely and then chiefly in the gardens of the Salt Range. Two Yellowish Wagtails (Sp.?) were the only *Motacilla* seen during the month, except an odd pair or two of the resident *M. maderaspatensis*. A Black-winged Kite (*Elanus caeruleus*), a pair of King Vultures, and a small species of Harrier noted.

May 3.—There is a nest of the Grey Indian Partridge (*Francolinus pondicerianus*), with three eggs in my compound. The nest, which is only a deep hollow scraped in the ground, is placed under a thorn bush, which has been grazed down so often that it grows as a great green pad pressed against the earth ; under this the nest is so securely hidden that it is all but invisible until the side of the bush is lifted, yet after a fourth egg had been laid a jackal or something found the spot and sucked three of the eggs.

These Partridges are very numerous here and all have paired off by now ; their ringing cry is to be heard on every side The most notable fact about the species is its habit of perching on trees, more especially to roost, when several birds may be found together on a bough, or in an old Crow's nest. The male grows a strong spur and is very pugnacious, being kept very commonly by the natives for fighting.

The splendid Black Partridge (*Francolinus vulgaris*) is here much less common, there only being some three or four pairs on the grass farm where they are informally preserved. Two Pygmy Cormorants (*Phalacrocorax javanicus*) noted at a pond, also what was probably a Wood Sandpiper.

May 4 -Took two half-incubated eggs from a nest of the White-eyed Buzzard (*Butastur tecsa*). The nest was a ragged unlined structure of sticks placed some twenty feet up near the trunk of a Shisham tree on the canal bank ; the bird was very excited and kept calling and settling in the tree whilst I was climbing. This curious little bird of prey is here, I believe, a resident, although as far north as Jhelum it is a summer visitor only ; it is a sluggish rather cowardly bird, usually to be seen sitting on a telegraph pole, or a low bush, occasionally dropping to the ground to capture a lizard, beetle, or grasshopper—its usual prey. The eggs are a dull skim-milk colour and are two or three in number.

Some dozen Wood Sandpipers and Common Sandpipers were observed feeding in a freshly irrigated field ; and a single Wood Sandpiper was seen early in the day. These were, of course, migratory birds.

A pair of Small Minivets (*Pericroctus pregrinus*) noted.

May 5. A pair of Hoopoes have three eggs in a hole in the wall some four feet from the ground in one of my out-houses. The nest is a fitting collection of cotton waste, tiny bits of rags and the like, plentifully besprinkled with old droppings and very smelly. When I was examining the nest in which the female was sitting, the male tried to make up his mind to attack me ; he flew up and hovered within a foot or two of me several times. There are few pairs about now and from the white on their crests they would seem to be *Upupa epops*.

I also found a beautiful little nest of the Common Wood Shrike (*Tephrodornis pondicerianus*) built at the extreme top of a large Kikur tree ; it contained only one egg. A few days later this nest was destroyed in a dust storm.

Several Wood Sandpipers and a pair of little Ring Plover (*Aegialitis dubia*) were noted feeding in the field mentioned yesterday.

A Single White-necked Stork (*Dissura episcopus*) seen, also two Golden Orioles (*Oriolus kundoo*), and a Red-headed Merlin.

May 6.—The usual Koel (*Eudynamis honorata*) calling. There are not many about, but I generally hear one every morning.

Left in evening for Bhiwani city.

May 8.—At Bhiwani, oppressive heat, followed by heavy dust-storm and rain.

A few Wart-headed Ibis (*Inocotis papillosus*) noted flighting in the evening, and I was informed that they pass along the same line every night.

May 10.—Bhiwani. While engaged in inspecting the Police Station, I noted a dull brown bird about the size of a Wryneck, which was perching on a long pole that was leaning against the roof; at intervals it kept on disappearing into one of the outhouses as if there was some strong attraction within. Accordingly when my work was over I looked into the building to find, as I expected, that the bird was a Brown Rock Chat (*Cercomela fusca*,) and that it had a nest on a shelf in the building. The nest was a neat cup, but very slightly put together, of fine grass and a few feathers and bits of cotton, heaped round with pieces of dry earth and plaster; it was sparsely lined with horse hairs. There were three eggs of a beautiful pale bluish green colour, speckled and spotted, most heavily on the cap, with various shades of reddish-brown and lilac-brown. This species is usually quoted as one of the familiar birds of the plains, but this is the first district in which I have met it.

In the evening a Snake-bird or Darter (*Plotus melanogaster*) flew past the bungalow.

May 12.—Returned to Hissar by train. Found a nest of the Large Grey Babbler (*Argya malcolmi*) placed about 15 feet from the ground in the end of a bough of a large Kikur tree; the nest was a flimsy construction of grass, and contained two fresh eggs. This fine babbler is chiefly remarkable for its extraordinary voice which recalls the squeak favoured by the Punch and Judy man. When a dozen of them are shrieking in concert the effect is must amusing. The species does not occur as far north as Jhelum, but I have found it common in the Ferozepore district.

A Black-winged Kite, a pair of King Vultures, and a pair of Lugger Falcons noted.

May 13.—A pair of Red-wattled Lapwings (*Sarcogrammus indicus*) have three eggs in a corner of a ploughed field just by my bungalow; the eggs are laid in a trampled hollow between the clods of earth and there is no semblance of a nest. The eggs are lying just anyhow, and not in the "points inward" position which one is accustomed to associate with the Plover family. The destruction of eggs of this species must be very heavy; the normal clutch consists of four, yet I have only once met with it; all the other nests I have found have held only two or three eggs and I have waited a day or two in each case to see whether more would be laid. I suppose in most instances the first egg or two laid had been destroyed.

A single Greenshank noted flying overhead in the evenings.

May 14.—A pair of Red-headed Merlins (*Aesalon chicquera*) were noted at a nest in a Shisham tree on the canal bank. I climbed up to the nest which was a rough structure of sticks lined with tufts of coarse grass, but it was empty. It appeared to be new and unused, but the date is rather late for them.

During the last few days I have been seeing a few large Bee-eaters and to-night found a large number of them prepared to roost in a small grove of thorn trees. I shot a specimen for identification and found it to be the lovely Blue-cheeked Bee-eater (*Merops persicus*). By the end of the month they became very general and abundant. Large numbers roost nightly in the tall grass jungle by a pond on the Cattle Farm.

A female Pied Bush Chat (*Pratincola capirata*) seen, the first noted here.

May 16.—During a heavy dust storm in the evening I saw 3 Martins flying northwards, and luckily secured one, to find it the typical English House Martin, *Hirundo urbica urbica*; they were of course migrating birds, but I cannot understand what they were doing here.

I came upon a pair of the Ashy Wren-Warbler (*Prinia socialis*), which were undoubtedly courting. One had a short tail, the other a long one; they were hopping about in a bough of a Kikur tree, bending and bowing in a manner that showed off the great muscular power of their legs to advantage, as they were able to assume with ease positions out of the erect. The tail was held high over the back in a Wren-like fashion. All the time both birds (I think) kept up a kind of wheezy chipping song, punctuated by a kind of click.

In the early morning a Cormorant (*Phalacrocorax carbo*) passed over my bungalow.

May 17.—A pair of Small Minivets (*Pericrocotus peregrinus*), 2 White-necked Storks (*Dissura episcopus*), some Night Herons (*Nycticorax griseus*), and some Yellow-eyed Babblers (*Pyctorhis sinensis*) noted.

Blyth's Reed Warbler (*Acrocephalus dumetorum*) noted: A few odd birds of this species were noted on various dates during the greater part of the month; there were also a slightly larger number of Sykes' Tree-warbler (*Hypolais rama*). In both cases these individuals doubtless formed the tail-end of the spring migration.

May 19.—Travelled during the night and reached Sirsa in the early morning. A Marsh Harrier, a Green Sandpiper, and a flock of six Stints or Common Sandpipers were noted by some pools.

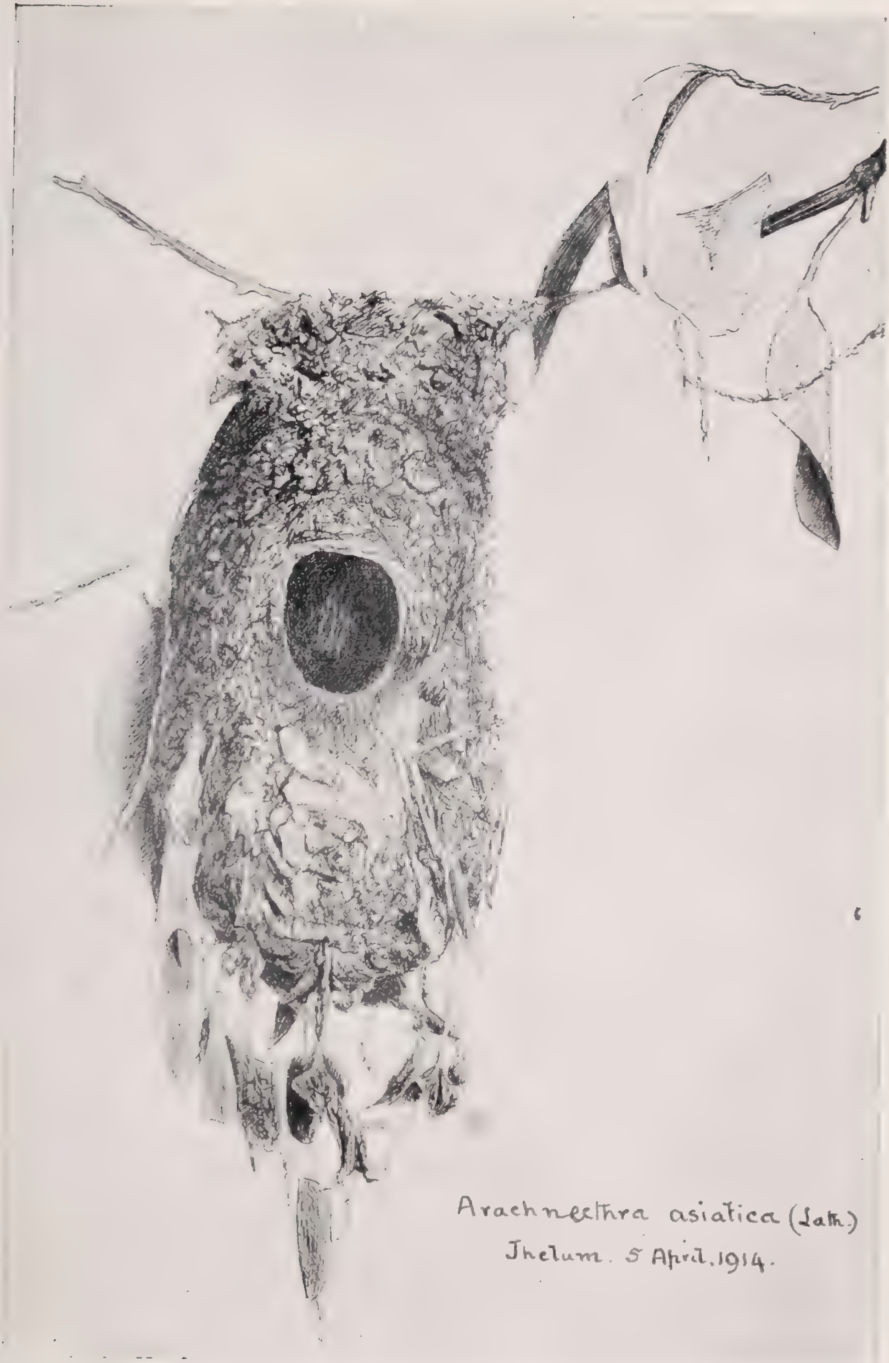
May 20.—Travelled some twenty-six miles on camel and horse-back from Sirsa to Ellanabad near the boundary of Bikanir State; the way lay through a level sandy plain thickly besprinkled with thorn and other bushes, varied by occasional patches of grass jungle and thorn trees. The most numerous birds were Common Babblers (*Argya caudata*), and White-eared Bulbuls (*Molpastes leucotis*) which were everywhere. Little Green Bee-Eaters (*Merops viridis*), Indian Robins (*Thamnobia cambaiensis*), and Purple Honey Suckers (*Arachnecthra asiatica*), were also common. Of larger species Peafowl and White-backed Vultures (*Pseudogyps bengalensis*) were numerous. A small flock of Weavers (*Ploceus baya*) containing a male in colour, were noted. Old nests of this species are common enough, both here and at Hissar but these are the first birds I have met with this month. Eight Sarus Cranes (*Grus antigone*), many Pin-tailed Sand-grouse (*Pteroclurus exustus*), a King Vulture, a Lugger Falcon, and a Red-headed Merlin seen.

May 21.—At Ellanabad. It is a wonderful sight to see the Peafowl here. They are strictly preserved by the natives and hence are as abundant as chickens and almost as tame, wandering everywhere. The males are now in full plumage with magnificent trains. At one time when I was working there were three cocks together within 30 yards of me, to say nothing of hens—the whole forming an interesting spectacle. Twice I noticed a hen displaying, exactly imitating the posture of the cock's display, but I could not see any meaning attached to the performance; one of the displays was certainly directed at a Crow that was standing on the ground near by.

May 22.—From Ellanabad to Ranian—the most noticeable bird about was the Blue-cheeked Bee-eater (*Merops persicus*), which was common all the way. There is a small Wren-Warbler about in these grass-jungles which looks like the streaked Wren Warbler (*Prinia lepida*) which I have not met before away from the big rivers. However, the Ghogga river is said to overflow these parts later on in the year, which fact presumably accounts for the presence of this bird.

An Egyptian Vulture seen sitting on a nest at the top of a large thorn tree. It was on the nest when I passed this way before on the 20th May. A Lugger Falcon seen.

At Ranian there is a large tank with a garden by it—



Arachnecthra asiatica (Lath.)
Jhelum. 5 April, 1914.

Nest of Purple Sugar-Bird. *H. Whistler, del.*

strong contrast to the acres of sandy jungle which surround the place; here were a large number of Night Herons and Pond Herons (*Ardeola grayi*).

May 23.—From Ranian to Sirsa by road in the early morning when numbers of Sand-Grouse (*Pteroclurus exustus*) were to be seen flying about, in parties of three and four.

An Eagle or two and a Raven noted: also a Lugger Falcon, and a Shikra.

May 24.—Several White-necked Storks (*Dissura episcopus*) about; one pair had apparently commenced to build a nest on a Shisham tree.

The lovely Wire-tailed Swallow (*Hirundo smithii*) seen; it is not very numerous here owing to the dry character of the country, but a few were seen throughout the month on various dates.

Made the acquaintance of the Red-winged Bush-lark (*Mirafra erythroptera*) which, when disturbed on the ground flew up to the top of a small tree and started singing there. The bird when shot proved to be a male.

May 25.—Found two nests of a Green Pigeon placed about twenty feet from the ground in some Kikur trees adjoining a large Banyan tree, the two nests were in adjoining trees and were both of the usual type, a scanty platform with a slight hollow in the middle, made of twigs and grass. The nests contained two eggs apiece and the birds sat very close. One bird, whose egg hatched soon after I had taken it (the second was addled), refused to move even when small pieces of earth came rattling about her ears. Unfortunately I failed to secure one of the birds then and the Crows took the second clutch which I left with a view to obtaining a bird later on, so the exact species remains slightly doubtful. It is, however, most probably the Southern Green Pigeon (*Crocopus chlorigaster*), whose eggs have been taken in some numbers at Hansie, fifteen miles away.

Twelve Black Ibis seen, feeding in a field.

May 26.—At the Cattle Farm Bungalow I saw numbers of Dusky Crag Martins (*Ptyanoprogne concolor*) flying about, accompanied by one or two Striated Swallows. They will doubtless nest in some of the innumerable empty rooms or vaults that lie under the Bungalow which is really a portion of Feroz Shah's Palace, some six hundred years old. It is pitiful to see how these tiny Swallows suffer from the heat. They settle on the walls and verandahs, wherever there is a little shade, and sit there with mouths wide open, and wings held well away from the body. So great is their distress that they allow one to approach within a yard or two before taking flight.

I drove round a portion of the Cattle Farm and came to a very large paddock surrounded by a wall. There the ground was very hard and dry with nearly all the grass worn away. Several Sandgrouse were flying about and settling to feed, and in one place I saw three Indian Coursers (*Cursorius coromandelicus*). I accordingly left the trap and went towards the Coursers which of course started running away from me in their usual fashion. Meanwhile I noticed a hen Sand Grouse (*Pteroclurus exustus*) which was moving away from me on the ground in a very leisurely manner, feeding as she went. Something in her demeanour made me suspect that she might have a nest near by and it did not take long to find it. There were three eggs lying on the ground in a hollow, which appeared to have been slightly improved by the bird ; there were a few pieces of dried grass stems under the eggs, but they looked as if they had been there originally and not introduced by the bird. The eggs were fresh.

A Pied Mynah (*Sturnopastor contra*) noted ; was the first I have met with. This must be its extreme north-westerly limit in these parts.

May 25.—A Pied Mynah and a pair of Green Pigeons seen in my compound.

May 28.—The hottest day of the month, the thermometer recording 119.2 degrees in the shade. On an irrigated field in the Cattle Farm were collected a number of White Ibis (*Ibis melanocephala*), Black Ibis (*Inocotis papillosus*), and White-necked Storks : A small dingy-looking Stork that was with them was certainly an Open-bill (*Anastomus oscitans*) ; a Cattle Egret (*Bubulcus coromandus*) in breeding plumage seen flying. At a small pond surrounded by dense grass jungle (the chosen haunt of a Sounder of Pig) I noted a pair of Pygmy Cormorant (*Phalacrocorax javanicus*).

May 30.—Found four nests of the Common Babbler (*Argya caudata*), three of which contained three eggs ; in the other there were four. All the nests were placed some three or four feet above the ground in small thorny bushes and the birds sat close. The nests were all rather deep cups but varied as to their foundations from a neat structure to a somewhat straggly mass. The foundation consists of grass, roots, bents, and small twigs, and the cup is made of a cotton-like fibre, mixed with fine roots ; an occasional horse hair and a few tiny Mimosa leaves serve as lining.

I visited some paddocks belonging to the Cattle Farm where about a dozen Black Ibis (*Inocotis papillosus*) were feeding busily in company with Mynahs, Doves, and a few Pin-tail Sand Grouse (*Pteroclurus exustus*). Amongst them stood a White-necked Stork hunched up in solitary meditation. These Ibis have a very plaintive cry reminding one of the screeching" of Gulls, and another note somewhat similar to that of a Curlew; when disturbed they gave vent to a harsh note several times repeated. Near by I saw a pair of Indian Coursers (*Cursorius coromandelicus*) which were probably breeding, but I could find no nest

On the way home my attention was attracted by the tremendous excitement of two Red-wattled Lapwings, which, on investigation, proved to be mobbing an Eagle (*Aquila vindhiana*). He rose from the ground pursued by the Lapwings, and I found that he had been at a nest of a pair of the irate birds. The three fresh eggs had all been broken into, and their contents partly devoured.

The grass jungle was full of Red Avadavats (*Sporaeginthus amandava*), Weavers (*Ploceus baya*), Blue-cheeked Bee-eaters (*Merops persicus*), Little Green Bee-eaters (*M. viridis*), and Wren-Warblers, while now and again a Crow Pheasant or Coucal (*Centropus sinensis*) would show itself. At the edge of the water I flushed a single belated Sandpiper, (probably *Totanus glareola*).

In some low bush jungle I came upon a number of small Larks which proved to be the Singing Bush Lark (*Mirafra cantillans*); and close by flushed a Little Button Quail (*Turnix dussumieri*) in practically the same place where I found it on May 3rd; yet it did not appear to be a breeding bird.

ERRATUM. April 10.—Page 203, line 3, after "Two other parties," Insert: *of Waders consisted probably of Ruffs and Reeves. There were signs of migration of the larger water*, and then read straight on.

Bringing Home Foreign Birds.

By W. A. Bainbridge.

Our esteemed Editor has asked me to write a short account of the few birds I brought back with me from Australia; considering the weather to-day, 88degs. in the shade, it would have been much more appropriate if he had asked me to have something long and cool in a glass, but he didn't, so I write this instead [So easy to have enjoyed both. Ed.].

I will preface my remarks by stating that I voyaged in and out by the same boat, so that my stays at the respective ports were very short ones.

I arrived in Australia, and at once began a feverish search for rare birds. My first enquiry was for Parrot Finches, and frantic wires were despatched in vain. I missed a large number at Sydney by arriving one day late, and was in consequence out of temper for the rest of the day.

At Adelaide I received a promise that 100 White-eyes should be waiting for me on my return, also pairs of Robins and Blue Wrens, yes, sir, nicely meated off ; I got none!

At Melbourne I was promised 200 at least of the rarer soft-bills, and some of them were actually new to English aviculture ; the rains came and none could be caught, and at Sydney I could buy none ; what a fearful blow to all my fine hopes!

As a result of this I had to be content with a few soft-bills that I caught myself. Striated Tit-Warblers, Yellow Robins, Red Robins and one or two Honey-eaters and one White-shafted Fantail (*Rhipidura albiscapa*), but just as I got them nicely meated off, as I thought, something went wrong and I lost the lot. The Tit-Warblers were delightful little birds, but one night they all bathed in bread and milk, caught cold and died!

I left Australia with 1 pair Red-capped Robins, 1 Spine-bill Honey-eater, 1 pair New Holland White-plumed Honey-eaters, 1 pair White-cheeked Honey-eaters, 1 pair Fuscous Honey-eaters, several Lunulated Honey-eaters, and several White-eyes, mostly bought from aviaries. Of these only pairs of White-cheeked, White-plumed, and three Lunulated Honey-eaters, and five White-eyes have survived. Three Robins died when I found my renewal supplies of insects at the Cape dead and putrid ; such is luck!

I had 13 pairs of Fire-tails, such beauties they were too, but a week saw the end of them all, the one species of Seed-eaters I, really wanted most, and the majority only cost 2s. a pair, being freshly caught.

Bicheno's and Sydney Waxbills ; 1 pair each of Parrot and Cherry Finches ; Diamond Sparrows galore ; 4 Parson Finches, 1 Masked Grassfinch, 8 Gouldians, 2 ♂ Diamond Doves, 2 pairs Blue-winged Parrakeets (*Neophema venusta*), 1 pair Hooded Parrakeets, 6 pairs Pennant's Parrakeets ; 1 Bare-eyed Cockatoo, 1 pair Leadbeater's Cockatoos, and a Wallaby left Australia with me.

The moral is plain to me, and that is, if you must bring Finches home stick to those which have been in captivity some time, and not those which have just been caught ; the latter die if you look at them, the former do not.

Twenty-four cages to clean and feed every morning, when you start at 7-30 and finish about 11 a.m. is too much, at least I found it so, especially if the weather is rough, for if your birds are under the forecastle head, as mine were, you realise what the motion of the boat is like and hate it every second, still it has to be done, although if one must admit the truth, the cleaning gets sadly neglected on rough days.

In Africa I managed to purchase some Malachite and Lesser Double-collared Sunbirds, which had been in captivity for seven months, these were no trouble at all, all with the exception of one cock Lesser Double-collared are still fit and well, which only emphasises what I have already stated, pay more and start with acclimatised birds.

If they ever come over I should strongly advise members to buy pairs of the following species at the first opportunity, Red-capped, Flamed-breasted, and Scarlet-breasted Robins; the Yellow Robin is really of the Shrike family, and is not to be trusted. White-shafted Fantail-Flycatcher, in fact, any of the Fantails: Emu Wren, Blue Wren, Diamond Birds (Pardoletes or Panther-birds), White-eyes and the Tit-Warblers. Of the Honey-eaters I consider the most beautiful to be: First, the Spinebill, then the Sanguineous, and after that the White-cheeked and White-plumed.

[We saw, the day after arrival, specimens of the following species in excellent condition and plumage: Honey-eaters—White-cheeked, White-plumed and Lunulated. Sunbirds: Malachite and Lesser Double-collared. White-eyes (2 ♂ and 3 ♀), and quite a crowd of Finches and Waxbills, among which we noted Diamond, Bicheno's, Parrot (1), Cherry (1), and Parson Finches; Sydney Waxbills, etc. Of the Africans there were some nice St. Helena Waxbills, Sulphury Seed-eaters, Alarios and Cape Canaries (Grey-necked Serins).

The Blue-winged and Hooded Parrakeets were exquisite, and the Pennants and also the Cockatoos named above were in beautiful plumage and condition.—Ed.].

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Editorial

NESTING NOTES: These are fairly promising so far, but as we appear now to have got rid of the cold nights, and are enjoying really hot sunny weather, we shall probably have many interesting records to note next month.

WM. SHORE-BAILEY, Westbury.

Young on wing: Brush Bronze-wing, Diamond, Necklace, and Zebra Doves; Cutthroats, Canaries, Sulphury Seed-eaters, and Greenfinch × Sikhim Siskin Hybrids. Also Black-cheeked Lovebirds, Rosella, and Alexandrine Parrakeets.

Young in nest: Bib Finches and Black Seed-Finches (doing well).

R. SUGGITT, Cleethorpes.

Young on wing: Grey-wing Ouzels, Peaceful and Red Ground Doves; Gold-breasted Waxbills; Zebra and Sharp-tailed Finches.

Young in nest: Bronze × Magpie Mannikin Hybrids.

DR. L. LOVELL-KEAYS, East Hoathly.

Young on wing: Rosella Parrakeets; Peach-faced Lovebirds (4); Magpie Mannikins; Zebra and Diamond Finches; Budgerigars (galore) and Cockateels.

Young in nest: Passerine, and Red-rumped Parrakeets, etc.

Young hatched out but not reared: Bearded Reedlings (lived five days), Blue Sugar-bird (lived ten days). A recent heavy storm drowned a promising brood of African Zosterops.

Incubating: Cactus Conures, All Green Parrakeets, Peach-faced

Lovebirds. Red-crested Cardinals, and many species of Grassfinches, etc.

T. **Hebb**, Luton.

Incubating: Peach-faced Lovebirds (2 pairs), Black-faced Lovebirds (3 pairs).

W. A. **Bainbridge**, Thorpe, Surrey.

Young on wing: Red-headed Finches (3), Californian Quail, Diamond Doves, Tricolour Mannikin × Bengalese Hybrids.

Incubating: Indian White-eyes (nest cup-shaped, not a cradle), several Greenfinches, Quail and Jacarini Finches, etc.

H. **Bright**, Cressington Park, Liverpool.

Young on wing: Diamond, Bar-shouldered, and Australian Crested Doves; Diamond Finches; Blue-breasted Waxbills, and Cuba Finches.

Young in nest: Magpie Mannikins and Cuba Finches.

Incubating: Yellow-rumped Mannikins; Melba and Aurora Finches; Red-headed Finch × Cutthroat hybrids; Yellow-throated Sparrow × Canary hybrids; Siberian Bullfinches; Olive and Cuba Finches. Young Melba Finches were hatched and lived for ten days, but were then thrown out of the nest by their parents. "Nearly everything breeding."

Captain **Reeve**, Leadenham, Lincs.

Young on wing: Cuba Finches; Lesser Redpolls (3 hatched out, but only one fully reared).

Miss **Lucas**, East Grinstead.

Young on wing: Magpie Mannikins.

Young in nest: Red-headed Finches..

Incubating: Magpie Mannikins, Zebra Finches, Fire-finches, and Bengalese.

Mrs. **Henderson**, Newcastle-on-Tyne.

Young on wing: Budgerigars, Cutthroats, Zebra Finches, and White Java Sparrows.

Incubating: Indian Bulbuls, and Cordon Bleus.

J. **Smith**, Kendal.

Young on wing: Stanley Parrakeets (2), and Many-coloured Parrakeets (4).

Rev. R. E. P. **Gorringe**, Dorset.

Young on wing: Silverbills (4), and Grey Singing-Finches (3).

A. **Sutcliffe**, Grimsby.

Young: Californian Quail (11), a week old and doing well.

Young in nest: Ruficauda Finches.

Incubating: Yellow-throated Sparrows (*Gymnorhis flavicollis*).

Miss E. F. **Chawner**.

Young. Eagle Owl.

Incubating: Indigo Bunting and one or more species of Owls.

W. T. PAGE, Mitcham.

Young on wing: Zebra Finches: Red-Mountain Dove, Lesser Redpolls (3), Grey Finches, Olive Finches, Bengalese, etc.

Young in Nest: Black Tanagers, Malabar Mynahs, Grey-winged Ouzels.

Incubating: A number of small Finches, Red Mountain Doves; Jungle Bush Quail; Gold-fronted Finch × Mealy Redpoll.

MISS A. B. SMYTH, Catford, S.E.

Young on the wing: Red-headed Finch × Cutthroat hybrids.

Incubating: Japanese Hawfinches are incubating three eggs, of an elongate shape, pale grey-green, lined and spotted all over with brown-black. The hen sat well, not even leaving her eggs during aviary cleaning operations. Her nest is of bass, which was pressed into shape by Miss Smyth and put into the branches, it is quite low down and very exposed. LATER: On June 17th, one chick was hatched out but only lived three days, the hen bird appeared to feed well. The hen is relining the nest, thus there is a hope that they may have another brood and we certainly hope failure will be crowned with complete success. Peach-faced Lovebirds (in a cage).

LORD MAYOR TRELOAR HOSPITAL ALTON AVIARIES: At a recent visit we found these aviaries looking very smart —the creepers, evergreen, and other bushes have developed and there is now admirable natural cover, the flight of the Finch Aviary being very pleasing and picturesque. By the time these notes appear there will be a charming display of Rambler Roses and promise of Bramble-fruit within the aviary, while the aroma of Honeysuckle and the beauty of its bloom all formed a fitting and natural setting for the birds.

The following species are engaged in the duties of incubation or are feeding young in the nest:

Yellow Buntings have a nice nest in the grass near front of aviary, and are incubating a clutch of four eggs.

Red-billed Weavers are feeding three young in a most interesting pocket-shaped nest, with a sort of porch over the entrance; the young appeared to be most lusty, and have every prospect of being fully reared. Young were reared of this species last season in the aviary.

Zebra and Ribbon Finches, and Yellow-rumped Serins are also nesting.

In the Parrakeet Aviary Budgerigars are as prolific as ever, two young Black-cheeked Lovebirds have already left the nest, and the parent birds are nesting again. Californian Quail are incubating a clutch of eggs.

The Trustees would gratefully acknowledge gifts of Finches or Parrakeets, Hen Cockateel, Hen Gouldian Finch, Hen Madagascar Lovebirds being especially desirable for the mating up of odd birds. We hope our members will respond by sending their surplus or odd birds, which will have a good home and every care.—*Address*: Alton, Hants.

FERTILE HYBRIDS: Last season Miss E. F. Chawner reared some Grey Singingfinch × Linnet hybrids; this season one of the cock hybrids has been mated up with a hen Linnet with the result that they now have two fully fledged young.

Miss Smyth's Red-headed Finch × Cutthroat hybrids have nested, but so far without result. One of the hybrid hens mated with a cock Red-headed Finch have nested in a cage, with the result of one young bird being hatched out, which unfortunately only lived three days.

Two very interesting episodes, and we hope Miss Chawner will describe both the nestling and mature plumages of her young birds a little later.

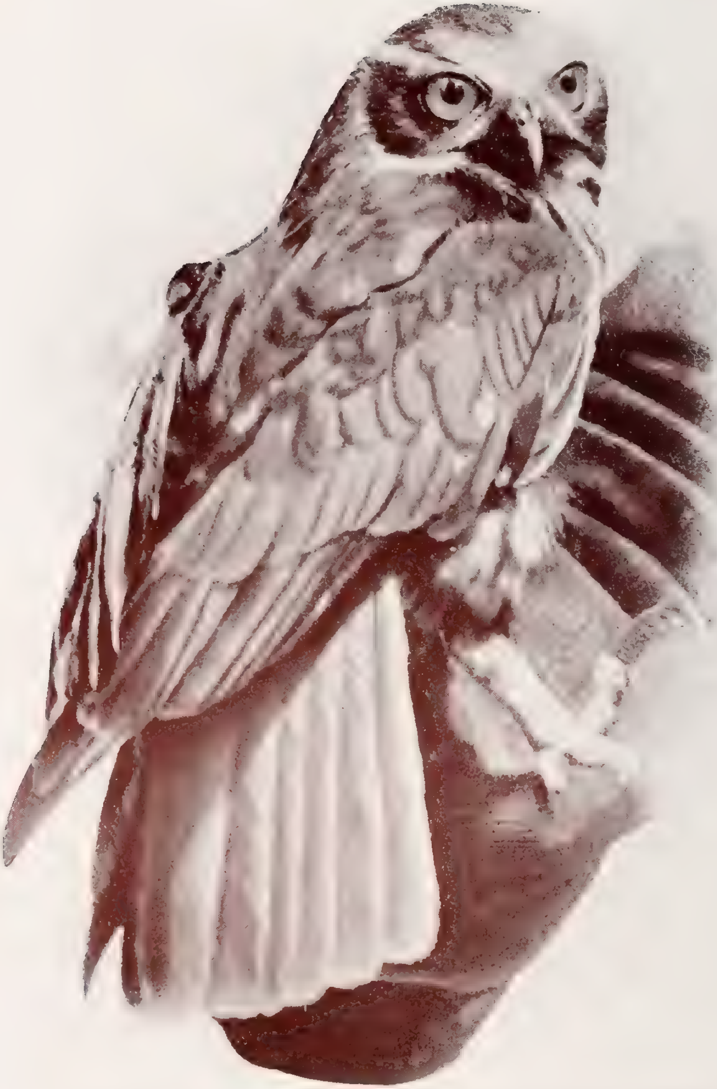
HYBRIDS: An interesting attempt at hybridisation has been made in Major F. Johnson's aviary, at Hove. During his absence a cock Fieldfare paired with a hen Missel Thrush and nested. The nest was placed in a very insecure place; it soon fell down, but the eggs were saved *they are a complete mixture of the egg of the two species.* Can any of our members quote similar instances referring to eggs of cross-mated birds of any species? The eggs were fertile. They have nested again, and when the nest was examined on June 15th, it contained one newly hatched chick, and two eggs. We hope the young hybrid may be successfully reared, also that Major Johnson will send us all the details possible, whether success be complete or no.

MR. A. EZRA'S BIRDS: We recently saw Mr. Ezra's fine series of Sunbirds, Flycatchers, Humming Bird, and other rarities, all in exquisite condition; a sight long to be remembered, but description must unfortunately be held over till next issue.

Many other interesting notes unavoidably held over.

Post Mortem Reports.

These Reports will be found on page 55 of Inset (Pink paper).



"Edwin."—Australian Marbled Owl (*Ninox ocellata*) ♂.

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BIRD NOTES:

— THE —

JOURNAL OF THE FOREIGN BIRD CLUB

An Easter Tour Among Members' Aviaries.

By WESLEY T. PAGE, F.Z.S., ETC.

(*Continued from Page* 235).

MRS. TURNER-TURNER'S AVIARIES: These aviaries have a charming setting in the lovely grounds around the house, the charm being that the wild character of the land is left untouched, only here and there are traces of cultivation to be seen and then introduced in such a manner that there is no harsh contrast, but the wild and the cultured blend harmoniously together.

The aviaries are barely two and a half years old, and are entirely artificial, that is contain but little growing plant life; yet the comfort of the birds is well looked after, ample and well lighted shelters are attached to each and the flights give ample space for exercise; almost every conceivable form of nest boxes are in evidence, and other contrivances all bore testimony to the thoughtful care bestowed on the birds. Brushwood, pine branches, bundles of straw, sheaves of coarse wild grasses, were distributed about to give the birds ample cover and retirement. Huge bunches of flowering and seeding grasses were distributed about on every hand and were well patronised by the birds.

We were received by Mr. and Mrs. Turner-Turner, and first looked over the birds in the house, including some newly arrived Blue Banded Parrakeets (*Neophema venusta*), which were in beautiful plumage—the house itself was a veritable museum, full of trophies, of Mr. Turner-Turner's prowess among Big Game, or one must say game, both large and small, also curios of every type from distant lands, and even with the attraction of the birds calling us outside, it was difficult to tear one's self away.

Passing into the grounds a most interesting time was spent looking over the aviaries and chattering over the aviary experiences with our host and hostess, in the course of which we gleaned that the following species all reared young to maturity in 1913.

Parrot Finches (*Erythrura psittacea*).
Bicheno's Finches (*Stictoptera bichenovi*).
Long-tailed Grassfinches (*Poephila acuticauda*).
Masked Grassfinches (*P. personata*).
Zebra Finches (*Taeniopygia castanotis*).
Cordon Bleus (*Estrilda phoenicotis*).
Diamond Doves (*Geopelia cuneata*).
Black-cheeked Lovebirds (*Agapornis nigricollis*).
Madagascar Lovebirds (*A. cana*).
Red-rumped Parrakeets (*Psephotus haematonotus*).

Green Singingfinches and Gold-breasted Waxbills hatched out but did not rear.

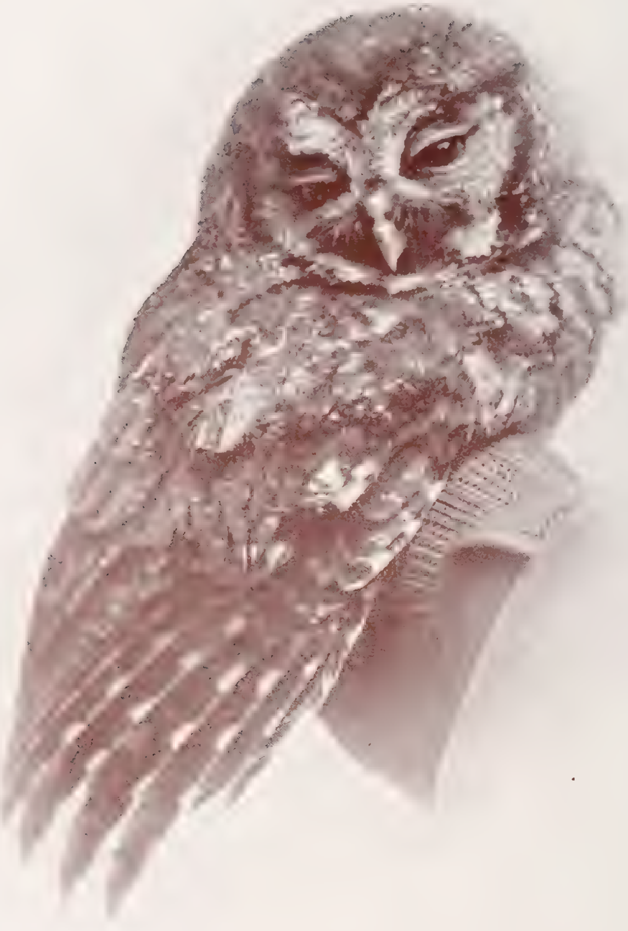
In the Parrot aviary were gathered together pairs of:

Rosella Parrakeets (*Platycercus eximius*).
King Parrakeets (*Aprosmictus cyanopygius*).
Crimson-winged Parrakeets (*Ptistes erythropterus*).
Pennant's Parrakeets (*Platycercus elegans*).
Many-colour Parrakeets (*Psephotus multicolor*).
Red-rumped Parrakeets (*P. haematonotus*).
Madagascar Lovebirds (*Agapornis cana*).
Black-cheeked Lovebirds (*A. nigricollis*).
All in perfect form.

In the Finch Aviaries we noticed, in addition to those listed as having reared young, the following species:

Gouldian Finches (*Poephila gouldiae*).
Pintail Parrot Finches (*Erythrura prasina*).
Diamond Finches (*Stenganopleura guttata*).
Grey Singingfinches (*Serinus leucopygius*).
Avadavat (*Sporaeginthus amandava*).
St. Helena Waxbills (*Estrilda astrilda*).
Indigo Buntings (*Cyanospiza cyanea*).
Spice Finches (*Munia punctulata*).
Firetailed Finches (*Aeginthus bellus*).
Pekin Robins and numerous Weavers and Whydahs.

Zebra and Spice Finches had already reared young and there were numerous nests in the various receptacles, brushwood, etc., large bunches of broom being much favoured as nesting sites; Gouldian and Bicheno's Finches, St. Helena and Gold-breasted Waxbills, and Avadavats were all incubating or feeding young; Pintail Parrot Finches and others were



" Binks."—Brazilian Scops Owl (*sp. incert.*)

nesting. The writer hopes that at the end of the season Mrs. Turner-Turner will relate the various episodes and successes, and illustrate same with photos of the aviaries.

Being due at Mrs. Chawner's to lunch and having already over-stayed our time, we were compelled to pass on to Lyndhurst.

Miss Chawner's Aviaries: Here we were most kindly received by Miss Chawner and her mother, and after lunch at once went out into the garden to interview the birds, but again and again was our attention distracted by the wealth of floral beauty around and the numerous greetings Miss Chawner received from her wild feathered pets, who persisted in their attentions till from her fingers they received the coveted tit-bit, viz.: a mealworm.

We first visited the Owls, of which Miss Chawner has a nice series, and among them some rare species. A perfect understanding exists between Miss Chawner and her pets, for there is certainly mutual familiarity. This is quite apparent in the plates, which accompany these notes—for the expression of each of the birds is restful content, which not even the camera-man has disturbed. I fain would have lingered with a few descriptive notes of these interesting birds, but space forbids and compels me to hasten on, *i.e.*, if these aviary yarns are to be completed before Easter, 1915!

We admired and observed the following species:

1 Brazilian Owl (*sp. incert*)—see plate.
Pair Eagle Owl (*Bubo maximus*)—nesting.
Pair Cyprian Scops Owl (*Scops cyprius*).
Pair Sparrow Owls (*Glaucidium passerinum*).
Pair Burrowing Owls (*Speotyto cunicularia*).
1 Tawny Owl (*Syrnium aluco*).
Pair Australian Marbled Owls (*Ninox ocellata*)—nesting. See plate).
1 Fernando Eagle Owl (*Bubo poensis*).
1 Mexican Pigmy Owl (*Glaucidium gnome*).

I have recently heard from Miss Chawner, that since our visit she has added a pair of Jardine's Pigmy Owls to her series.

The Finch Aviary has already been described by Miss Chawner in our pages, and it must suffice to say here that it consists of a flight, which is more or less filled up with brushwood, supplying excellent cover for nesting purposes and also shelter from unkind climatic conditions. The shelter is quite snug and draught proof, so that one readily understood the birds' happy and contented demeanour and general fitness.

Among others we observed the following species :

Tri-coloured Parrot Finches (*Erythrura trichroa*).
Yellow-winged Sugarbirds (*Coereba cyanea*).
Heck's Grassfinches (*Poephila hecki*).
Silver-eared Mesia (*Mesia argentauris*).
Pekin Robins (*Liothrix luteus*).
Indigo Bunting (*Cyanospiza cyanea*).
Rainbow Bunting (*C. leclancheri*).
Black-chinned Yuhinas (*Yuhina nigrimentum*)
Hooded Siskins (*Chrysomitris cucullata*).
Bicheno's Finches (*Stictoptera bichenovi*).
St. Helena Seed-eaters (*Serinus flaviventris*).
Green Avadavats (*Stictospiza formosa*).
Pagoda Mynahs (*Temenuchus pagodarum*)
Waxwings (*Ampelis garrulus*).
Pine Grosbeaks (*Pyrrhula enucleator*).
Hybrid Grey Singingfinch × Linnet.

After all too short a visit to exhaust the interest of Miss Chawner's collection, we left for Brockenhurst.

MRS. CONNELL'S AVIARIES: Unfortunately Mrs. Connell was from home, and in her absence we were taken round by the gardener, who also has the care of the aviaries. These are fine, spacious, natural aviaries, which, without illustrations we can simply describe as a range of shelters forming the back, with extensive flights in front, and excepting those devoted to the Parrot tribe, all possess an abundance of natural cover; such as Box, Cypress, Laurel, Sweet Bay, Pine, Privet, Ivy, etc. All the birds occupy the aviaries throughout the year and no heat is supplied. I am giving numbers to them, but these apply merely to the order in which we passed through them.

No. 1.—Many-colour Parrakeets (nesting), Glossy Calornis (*Calornis chalybeus*).

No. 2.—Red-rumped Parrakeets, Peach-faced Lovebirds (*Agapornis roseicollis*), Black-cheeked Lovebirds.

No. 3.—Barnard's Parrakeets (*Barnardius barnardi*), Yellow-bellied (*Platycercus flaviventris*), and Port Lincoln Parrakeets (*Barnardius zonarius*), Black-headed Weavers (*Hyphantornis melanocephalus*).

No. 4.—Cockateels, Virginian Cardinals, Canaries, Nonpareil Bunting

" Rikki-Tikki."—Fernando Eagle Owl (*Bubo poensis*) from Fernando Po.

(*Cyanospiza ciris*), Chinese Bunting (*Emberiza rutila*), Green Singingfinches, Goldfinches, and Zebra Finches.

No. 5. Pennant's Parrakeets and Orange-headed Ground Thrush (*Geocichla citrina*

No. 6.—Pekin Robins and Violet Doves (*Leptoptila jamaicensis*).

No. 7.—Victorian Crowned Pigeons (*Goura victoriae*), Black-headed Sibia (*Malacias capistrata*), Silver-eared Mesia, White Java Sparrows, Diamond Finches, Chestnut-bellied Blue Rock-Thrush (*Monticola erythrogastra*) and Zebra Doves.

No. 8.—Red-collared Lorikeets (*Trichoglossus rubritorques*) and Aust. Crested Doves (*Ocyphaps lophotes*).

The Large Aviary: This is a fine large enclosure of irregularly turfed ground area, with some evergreen bushes, which in spite of some of its occupants (Parrot tribe) manage to exist. In one of these, a Cypress bush about four feet high, a Silver-eared Mesia was incubating a clutch of eggs. We noticed the following species disporting themselves in a state of semi-liberty:

Hybrid Red-rumped Parrakeets, Pin-tailed (*Vidua principalis*). and Paradise (*Steganura paradisea*) Whydahs, Virginian Cardinals (*Cardinalis cardinalis*), Saffron Finches (*Sycalis flaveola*), Nonpareil Buntings, Goldfinches, Wild Canary, (*Serinus canariensis*), Zebra Finches, Blue Grosbeak (*Guiraca cyanea*), Silver-eared Mesia and Californian Quail (*Lophortyx californicus*).

The Conservatory Aviary: This is another roomy enclosure running along the front and one end of a long conservatory, into which one or two of the house windows open. The glass of the roof over aviary portion is covered; all glass lined with wire netting on the inside, and the front of the aviary is light wood framing and wire netting, suitably furnished with plants, branches and nest receptacles (galore), and the whole effect is most pleasing. It contained quite a large number of birds, some of which were already nesting. The list is not a complete one, but we noted *en passant* the following species:

Pintail Parrot Finches, White-eyes, Green Avadavats, Red Avadavats, Bronze Mannikins, Grey and Green Singingfinches, Long-tailed Grassfinch, Orange-cheek and Gold-breasted Waxbills, Silverbills, Red-headed Lovebirds, Canaries, Grey and St. Helena Waxbills, also Gouldian, Cuba, Bicheno's, Zebra, Alario, Ruficauda, Diamond and other Finches.

In cages were a very fine and tame Shama and an exquisite Tri-colour Tanager.

MR. RATTIGAN'S AVIARIES: These are largely prospective: Mr. Rattigan only having recently moved to Brockenhurst, bringing with him only the nucleus of the future collection. At the time of our visit only a portable aviary was erected, which contained the said nucleus and stood at the end of the lawn.

Over a cup of tea many avicultural experiences were exchanged and a most interesting time was spent in chatting over methods and recounting failures and successes. Afterwards we were shown the site of the prospective aviary, which certainly promises to be a practical and roomy structure. and we certainly expect Mr. Rattigan to have better results amid the more favourable New Forest locality than he met with in South London.

This completed our visits for the day and further experiences must be left for another instalment.

To be continued.

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Some Experiences of Cockatoos.

(*Continued from page* 225).

BY THE MARQUIS OF TAVISTOCK.

It had long been my ambition to keep and attempt to breed the magnificent members of the genus *Calyptorhynchus*, which are so rarely imported and about whose habits so little is known. It was therefore with great joy that in the autumn of 1911 I received the offer of four fine Banksians, which had passed into the hands of a dealer, after the death of their owner, the late Sir Charles Lawes-Wittewrong. On arrival they proved to be a cock and three hens and the attendant who accompanied them told us that they had been named (somewhat regardless of sex), Teddy, Timmie, Toby, and Yalla-Yalla. Teddy was the cock, the largest and finest Banksian I have ever seen, entirely black, save for the scarlet bar across his tail -gentle, dignified and full of character. Timmie was the smallest of the quartet, and the only other really tame one. The plumage of the head and shoulder was thickly covered with round yellowish spots, her breast was barred with yellow and dusky red, and her tail bar was yellowish-red freckled with black. She was very sociable, but inclined to get "huffy" if crossed in any way and she had a great objection to being interrupted at her meals or to being approached by a person wearing a white apron. Toby and Yalla-yalla were two big birds, apparently belonging to the Great-billed race (*C. macrorhynchus*). They were much like Timmie in colour and markings, but had little or no red in their plumage. They were rather shy in disposition and although they would feed from the hand when hungry would never consent to perch on one's arm or shoulder.

As soon as they arrived I turned the four birds into a large covered aviary where they had plenty of room to move about and use their wings. I soon noticed, rather to my surprise, that although he had spent (as I had been told) some years in their society, Teddy had not entered into anything resembling a matrimonial alliance with one or more of his companions, his attitude towards all three ladies being a mixture of timidity and indifference. It was clear, therefore, that unless they could be allowed a freer and more natural existence, the chances of breeding were likely to be of the poorest, although at first it seemed too risky to allow such valuable birds complete liberty, I ultimately decided that it was the only thing to be done. Relying on his extreme tameness and on Gould's statement that the flight of the Banksian is laboured and seldom of long duration. I accordingly one day gave directions that Teddy was to be placed in the outer part of the aviary, and the door left open. Going out soon afterwards to see how things were getting on I found Teddy flying round the garden in full enjoyment of his newfound freedom. The sight of the great bird on the wing was indeed striking and one which I shall certainly never forget; the flight of a black Cockatoo is wholly unlike that of anything else and although not particularly rapid, gives to my mind an impression of extraordinary buoyancy rather than effort. The long, round-tipped wings are moved with slow, swinging flaps, almost meeting beneath the body at each stroke, while at times they are bent sharply downwards and held rigid in marked contrast to the usual avian habit of gliding forward with the wings motionless and on the same plane with the body. The whole time he was in the air Teddy kept uttering his peculiar call deep, melancholy, and sonorous--"just like a lost soul," as someone described it. When at rest, his cry was shorter and less loud and varied in intonation according to the state of his feelings. The call of the hens when on the wing, was, as I found later, harsher, and higher pitched, and at other times they often made a gentle whining noise only audible at the distance of a few yards. When frightened they uttered a low hiss, and, if greatly terrified, a loud grating scream, at the same time flattening their crests and not raising them as most Cockatoos do when alarmed.

For the first few days Teddy kept us well occupied in looking after him. It was all right as long as there were plenty of his friends in sight to keep him company, but at other times, and especially in the late evening, he would take long flights and it was often a difficult task to overtake him and bring him home. On one occasion he went further than usual and completely lost his bearings, but fortunately he had the sense to make his way to the nearest village, where he repaired to the public house, and waited quietly for someone to come and fetch him. Very soon, however, he got to know the geography of his new home thoroughly, and although he made plenty of use of his wings, he gave us no more trouble as long as I had him. At first we always made a point of shutting him up at night, but he soon grew to resent this and would not allow himself to be caught; so, as he appeared to take no harm from sleeping on his favourite perch—the window-sill of one of the upper rooms in the stables—I allowed him to have his own way and roost in the open air. Like most Banksians, Teddy was a small eater, with little partiality for tit-bits. If he had a weakness for anything it was for butter, of which unwholesome viand he would consume a good deal if allowed the opportunity of doing so. His staple food consisted of sunflower seed, and monkey nuts; fruit or green-stuff of any description he would not touch.

In disposition he was, as I have said before, gentle and dignified, and always ready to be friendly with human beings of both sexes; at the same time he would never force his company upon you when you did not want him—a rare virtue in a tame bird! He had one peculiarity, which he shared in common with all tame Banksians I have seen, and which distinguishes them from other Cockatoos, viz.: a great objection to being handled. He liked nothing better than being talked to and allowed to perch on one's arm or shoulder, but any attempt to stroke him provoked an impatient shake of the head and a half-opening of the great beak--firm but gentle warnings which no one had the temerity to disregard! Teddy was always attached to me and never failed to show extra pleasure on my return after a long absence, but it was a gardener who really won his heart. He used to follow the man everywhere, showing the greatest concern if he were absent for more than a day and scouring the country far and wide in search of him. When he went home in the evening Teddy generally accompanied him, flying after his bicycle for more than a mile, and not returning until he had seen him enter his house. Sometimes when I was coming home late I would meet Teddy on his way back. First I would hear his call sounding faintly in the distance, but gradually growing louder, his approach being often heralded by the noisy rising of flocks of feeding wildfowl who always regarded him with suspicion as a kind of gigantic Hawk. Finally the great dark shadow would drift silently over my head and Teddy would sail back to his window-ledge. Even then he did not always settle down for the night, but long after dark had fallen and again before dawn, he would often take wing again and I could hear him calling as he circled round the house. The other Banksians, as far as I could tell, never indulged in these nocturnal flights. Towards other birds Teddy showed a remarkable degree of timidity, and he would move out of the way of the smallest Parrakeet. The rest were very like him in this respect, and even the short-tempered Timmie was ready to give way to a cheeky Red-collared Lorikeet, not a quarter her size. Teddy never modified his attitude of aloofness towards the hens of his species, although one of them showed an obvious desire to mate with him; he was ready enough, however, to perform his display for the benefit of his human admirers. On being called by someone he knew, he would throw up his crest till it assumed the shape of a Roman helmet, turn and walk towards them. As he came nearer, he would suddenly spread his tail laterally to expose the scarlet bar to its full extent, and at the same time take five or six steps in a peculiarly jaunty fashion, as if performing some kind of stately dance. Occasionally, too, he would bring up food from his crop in the characteristic Parrot fashion.

As soon as Teddy appeared to have thoroughly settled down, I gave Toby her liberty also, leaving the door of the aviary wide open in case she wished to return at any time for shelter, and placing Yalla-yalla inside in a cage to act as a decoy. For two days everything went well and, although she did not re-enter the aviary, Toby came down to feed and showed no disposition to stray. Then I released Timmie, and the same evening, as ill-luck would have it, a heavy cold rain set in, which lasted for 48 hours. Teddy was easily persuaded to remain under cover -Banksians dislike rain and take no pleasure even in a warm summer shower, which sends most Cockatoos wild with delight but the two hens refused to follow his example, and when on the second day both had disappeared, I began to feel extremely anxious. On the third day, however, Toby was discovered in a weak and draggled state not far from the door of the aviary she had so foolishly declined to enter and a few hours later the excitement of a flock of Rooks attracted me to the spot where Timmie was lying about half a mile away, in an equally exhausted condition. Both made a quick recovery under the influence of food and warmth, but I had come unpleasantly near losing them and determined to run no more risks until the weather became milder. Teddy, however, remained at large and for several weeks seemed perfectly indifferent to frost, rain, and snow, and it was not until we had had three consecutive days of fog, accompanied by a very low temperature, that I noticed him sitting with his head under his wing more than I liked and decided that it would be prudent to keep him shut up for some time. Towards the end of winter I exchanged Yalla-yalla with the late Herr Carl Hagenbeck for another male black Cockatoo. Nearly a week afterwards, I received an anxious telegram saying that the bird had touched no food since her arrival, and was very weak, and would I say to what diet she had been accustomed. I wired back "Sunflower-seed and monkey-nuts," and was later relieved to hear that Yalla-yalla's appetite had returned when her familiar menu was provided, and that she had made a good recovery. Apparently she had only been offered hemp, canary, and oats, with fruit and bread, and there is not the slightest doubt that she would have starved to death rather than touch this wholesome and palatable diet on which some members of her race have thriven well. Banksians are curious birds in this respect, and in buying new ones it is of vital importance to enquire how they have been previously fed. Some will only touch one seed and some another, but a mixture of hemp, sunflower, and peanuts so indigestible to many Cockatoos when given in excess, is undoubtedly for them the most wholesome and satisfactory diet whether they are kept in close confinement or at liberty. The new male, whom the men christened "Henry," proved to belong to the Western race (*C. naso*). He was quite a small bird, smaller than Timmie, and had a short, rounded crest. Like Teddy, he was extremely tame and gentle with humans, but like him unluckily, wholly indifferent to the female society of his own kind. He settled down at once in the aviary and seemed contented from the first.

To be continued.

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Birds In and About the Station (Bakloh, Punjab).

By Major G. A. Perreau, F.Z.S.

(*Continued from Vol. II., N.S., page* 339).

MUSCICAPIDAE—FLYCATCHERS.

The Flycatchers are well represented, there being no fewer than fourteen species observed. From the book one might expect to meet with two more, but on the other hand two of those observed were not expected so far North-West. From an avicultural point of view with a few exceptions they form a charming group. Many are of brilliant plumage and are well fitted for exhibition, becoming almost too steady to my mind. Except perhaps the Niltavas, all show to better advantage in the aviary. The White-throated Fantail is our only permanent resident; some are summer visitors, but most only pass through on their way higher up or lower down. Some of these last pass up very late in the spring and pass down very early in the autumn, thereby getting a very short breeding season and incidentally avoiding my trapping season.

Some of the most fascinating Indian ones are only found further South-East, worse luck! still we cannot complain.

As to feeding, I have caught and kept over a dozen sorts including a large proportion of non-locals, and have found that all, including the Rufous-bellied Niltava and the Verditer, require care to meat off. A few I have failed to meat off, but these hardly had a fair chance and I hope to try them again under more favourable circumstances. Once meated off, all have been good livers. Of course casualties have occurred, but these have been by accident or some easily traceable cause, showing that there has been little amiss with the feeding. I propose to deal with various foods another time, so it will be sufficient to say that a good insective mixture with a small regular supply of live food will feed Flycatchers as well as Robins. Some species are partly berry feeders and will take and benefit by fruit. I have found most birds eat and at any rate take no harm from milk-sop, but many people do not agree with me in this.

An ordinary ground spring-net trap baited with a mealworm on a thread will take many species, but the truest Flycatchers hardly ever, if ever, go on the ground and for these I have found my hanging spring-net trap very deadly fcr any that can be tempted by a mealworm. The Fantails will not take a mealworm, but they are easily taken in a flue-net; I should say it would be almost impossible to put a small flue-net in a tree frequented by a Fantail without catching it.

The Sooty Flycatcher (*Hemichelidon sibirica*) is a dainty little bird of sombre plumage, a summer visitor to the Station, and about the commonest Flycatcher here. I have never heard its note, and have never attempted to keep it, as it is just a little brown bird lighter underneath and of little interest aviculturally. I confess to liking a bit of colour, a crest or long tail, or even minute size, or quaint features, or ways. My wife's list of "sparrow-birds," as she calls them, is considerably larger and more comprehensive than mine, but I unhesitatingly put this species on my list. Still it is a nice little bird to have about the place, and its nest is always worth looking for, as it takes some finding, even when one is certain of the tree it is in. It is placed a good height up on a branch against the trunk, I have known it in a medlar (a tree with a small trunk), but it is usually in a "chil" (to rhyme with teal). This is, I believe, the Scottish Long-needled Pine, the branches are usually horizontal and have no needles except at the tips, yet it is very easy to miss the cup one knows must be there. Length of bird about 4.5 inches, a true Flycatcher.

THE ORANGE-GORGETTED FLYCATCHER (*Siphia strophiata*). This is a charming bird, feeding largely on the ground, which fact may account for the ready way it takes to captivity. I put it down as partly a berry eater, at any rate in captivity it is quite fond of milk-sop and wild medlar, a fruit most of our winter and early spring visitors are partial to. The latter are lucky if they find any left for them. This bird arrives about the end of January and leaves us for its breeding grounds about the end of March. I have not met with it in Chamba up to 9,000, but of course it may breed lower down or it may go right away. Oates mentions it being found in summer in Assam at 12,000. Nothing apparently is known about its nidification.

Though not of brilliant plumage even my wife could not call it a sparrow-bird. General colour: sides of face and threat black; forehead and short eyebrow white, patch on throat orange, breast slaty, other under-parts white. Tail blackish, all the feathers except the middle pair with a white patch increasing in size on outer feathers. The hen has the orange patch smaller and has less white on the face, the black on the throat and face is replaced by slaty. Length 5.5 inches.

THE RED-BREASTED FLYCATCHER (*Siphia parva* or *hyperythra*) passes through in early autumn appearing again at the end of March, leaving at the end of April or beginning of May. It is not so common as the last species and is not so much of a ground feeder. The only one I kept did very well and looked very nice in the aviary; its best feature, the large amount of white on the frequently expanded tail, would be missed a good deal in a cage. With other birds I let it go during one of my periods of shortness of live food. I had just caught a Speckled Piculet and a Little Forktail, both of which take some catching, and both long-desired. The expected consignment of mealworms did not arrive, maggots were not too plentiful, and in any case these latter (our kind at any rate) are only a help. I grasped the shadow and kept my prized captures. They died in about ten days, after consuming enough live food to have fed far more than the birds I let go. What is one to do in such a case? · Had I been successful I should barely have regretted my loss. Of course one answer would be to make better arrangements for live food. With a little less bad luck my arrangements would have worked perfectly. To completely eliminate the element of luck one should be a bit of a millionaire. As it was my financial resources were stretched to nearly the limit. I now rather shudder to think of what kind of furlough we should have had in 1913 if I had lost my birds. At Charing Cross I had nothing in the bank, no pay to come for two months, and only two sovereigns and some silver in my pockets. I had not even my return ticket to India, an incidental loss. However, thanks chiefly to our Editor, I about cleared all tangible expenses. I'm rather glad I did not keep careful accounts, they might put me off trying a collection again, still I got my full share of pleasure out of it, though some people might call it hard labour. Poor people. They can't understand! Next time (I hope there will be a next time) financially I shall have a freer hand and shall be able to make better arrangements. I fear I have rather got off the subject, more like an instalment of "My Indian Consignment," a series I have left alone too long to re-continue.

I have never seen this bird in its breeding ground. It is a dainty bird, greyish brown above and greyish white beneath, with a "Robiny" chestnut breast. The tail is black with a good deal of white on it. Length about 5 inches.

THE SLATY-BLUE FLYCATCHER (*Cyornis leucomelanurus*): Like the next species and the Verditer these arrive here on their way down towards the end of July, leaving at the end of November, passing up again from the middle of February to the end of April. This species pays slightly longer visits, and the Verditer rather shorter visits than the above. Most of the early autumn visitors are, I fancy, young birds. I caught one straggler late in December, 1912.

This bird took readily to confinement in a cage, but when loosed in the aviary, after the first few days it began to neglect the soft food dishes and attempt to exist on what he could catch for himself. I was a bit dilatory in catching him out again and so lost him. He had been in a cage for nearly a month, and for far the greater part of that time soft food had been his staple diet. He was in beautiful condition when loosed, not light nor yet too fat. Of course all birds want a bit of watching when first put into the aviary, but flycatchers require longer watching than most. I have found others behave in a similar manner, but they have been all right after a second spell of cage-life. I kept a hen for a bit this year with two or three other odd sexes but it was rather near the end of their season here, and after a fortnight's failure to make up pairs I let them go. It is wonderful how easy it is to meat off successfully cent per cent when one has only a few birds to look after. Eight specimens of the fascinating Crested Black Tit and a pair of "snow-on-the-ground" winter-caught Tailor Birds in show condition face me in the verandah aviary as I write, and my other captures (bar one Tit killed by accident) are, to the best of my belief, disporting themselves in their native wilds higher up the hill, but their natural enemies especially the Little Owls may have had something to say against that. I seem to have got off the rails again. The presumed subject of this note is a charming little bird though not gaudy. General colour dull blue above, with a very greyish blue forehead and eyebrow, grey underneath with a white chin and throat, tail black with the basal half of all the feathers except the middle pair white. The hen is brown above and buffy-white underneath, with a white throat. Length about 4.5 inches.

THE WHITE-BROWED BLUE FLYCATCHER (*C. superciliaris*) is a very near relation of the last but is much more striking looking owing to the sharp contrasts in the plumage. Whole upper plumage dull blue, brighter on the edges of wing and tail feathers, sides of neck and a large patch on each side of the breast dull blue, remainder of lower plumage white, the basal half of all the tail feathers except the middle pair is white. It always reminds me of a sprightly old gentleman in evening dress with a white waistcoat, the coat being cut rather high in the waist and partly concealing the lower part of the shirt. The hen is brown above and whitish buff below. Length about 4.5 inches. As a matter of fact there is white in the tail as in the last species and the rest of the tail is black edged with blue, and the wings are brown edged with blue, but the general look of the cock is as above.

It breeds from 6000 to 9,000 (and probably higher) in May and June, building in a hole or crevice of a tree, laying 4 to 5 pale green eggs covered with reddish marks. The young soon attain adult plumage. I found one nest about six feet down a small hollow tree about fifteen feet high. The old birds went in at the top and, in spite of the tree being fairly well covered with ivy, I should have thought the nest would have got very wet. The brood was brought off all right.

I have kept several other species of Cyornis, including the fascinating Little Pied Flycatcher and found them do well in captivity, at any rate in a cage.

To be continued.

◆

Breeding of the Sulphury Seed-Eaters.

(Serinus sulphuratus).

BY WM. SHORE BAILY.

Towards the end of May my hen Sulphury Seed-eater was seen carrying nesting material. For two or three days she did her best to construct a nest between the wire-netting of the aviary and a piece of larch (used as a perch), but was unsuccessful.

At last a more suitable site was chosen, and in one day she constructed a rather untidy cup-shaped nest, principally of roots and twigs, lining it with white goat's hair. The cock took no part in the construction, save that of an interested observer.

On May 30th the nest contained four pear-shaped eggs, of a greenish-white colour, without any markings whatever. The hen alone incubated, being fed by the cock on the nest. Incubation lasted fourteen days, and on June 13th two chicks were hatched. Thirteen days later they left the nest, having apparently been reared on seed alone. They were very

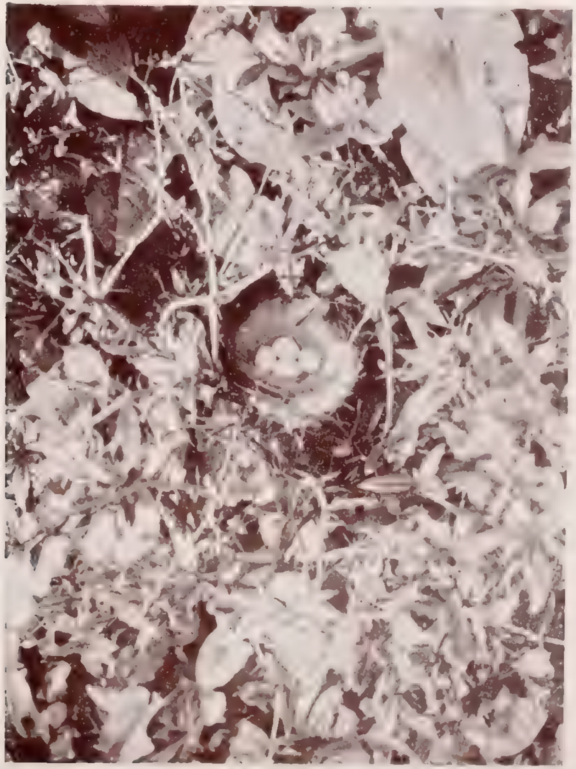

Photo by W. Shore Baily.

Nest of Sulphury Seed-Eater
(*Serinus sulphuratus*).

Photo by W. Shore Baily.

Nest of Black Seed-Finch
(*Melopyrrha nigra*).

strong on the wing, flying well on the day they left the nest.

The nestling plumage was grey, tinged with grĕen on flights and tail, and striated with brown on the breast and back. But for their shorter and thicker beaks they could easily have been mistaken for young Pied Flycatchers.

They are as tame as young Canaries and a week after leaving the nest would take seed from the hand; this, however, they seemed unable to crack, and they were in equal difficulties with a live mealworm. I fancy that insect food forms a very small part of their dietary. At the time of writing, July 15th, they are quite independent of their parents, who show signs of going to nest again.

These birds are well worth a place in any aviary, being very attractive and the cock is a fine songster.

◆

Nesting of the Black Seed-Finch.

(*Melopyrrha nigra*).

By Wm. Shore Baily.

This is a by no means common species, and though not of brightly coloured plumage they are yet interesting and handsome birds, and may well be sketchily described as miniature Black Bullfinches. Their native habitat is Cuba. In demeanour and general characteristics they closely resemble Olive, Cuba, and Jacarini Finches.

The first week in June I noticed both my Black Seed-Finches carrying nesting material. By the 10th they had completed a domed nest of grass and hair in a bush. It was a rather flimsy structure and was unlined.

On the 15th the first egg was laid, followed by two others, one of which I removed. The eggs were white marked with dirty grey blotches. Incubation lasted twelve days and was shared by both parents.

As soon as the young were hatched both parents became very tame and would take mealworms from within a few inches of my hand. These were supplied every two hours. I also saw them diligently searching the shrubs, etc., for blight, but never observed them hawking for flies, as do the Weavers.

When feeding young a good deal of spray millet and other seeds were taken, but mealworms were their favourite food.

All went well for ten days, by which time the young were quite well feathered, when a heavy thunderstorm at night, followed by a frost, destroyed my hopes of winning a medal.

They have now again gone to nest, this time in a box under cover, so there is just a possibility of my yet rearing one or two of these attractive little birds this season.

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My Weavers and Whydahs.

By Sidney Williams,, F.Z.S

(*Concluded from page* 216).

My collection of Whydahs is much smaller than the series of Weavers already described, and consists of nine specimens covering five species, as follows:—

1 Golden-backed Whydah (*Penthetriopsis macrura*).
2 Red-shouldered Whydahs (*Coliopasser axillaris*).
1 Jackson's Whydah (*Depranoplectes jacksoni*).
2 Paradise Whydah (*Steganura paradisea*).
3 Pintail Whydahs (*Vidua principalis*).

I am shortly expecting to receive from a friend, shortly returning from Africa, a Queen Whydah (*Vidua regia*) and several more Yellow-backed Whydahs.

Except the Jackson's, which has only been with me a few weeks and therefore I can give no opinion at present, I find the above species quite hardy. They live with my series of Weavers quite happily, and are well able to look after themselves. This is evident, as Paradise, Pin-tail, and Red-shouldered have been with me nearly four years, and at the time of writing (July 20) are in excellent condition.

Similarly to the Weavers, the Whydahs change their garments twice in the course of the year. In the eclipse or winter plumage they are quite sombre looking, and one would not trouble scarcely to give them a second glance; but when the transformation, which takes place at the commencement of the breeding season, is complete, and their tails reach a length of fourteen inches or more, they are different creatures and their gorgeous nuptial dress commands admiration from everyone.

In undress (eclipse plumage) the Pintail and Paradise would cost about 3s. 6d. each, but the others anything up to 60s., according to the number on the market. Being hardy and docile they are worthy a place in any aviary, and they also make excellent cage birds.

When kept in cages, the cages should be specially made, and the perches, food and water vessels, should be fixed twelve to fourteen inches above cage bottom. This enables them to keep their long tail plumes clear and unfrayed. A little coaxing with a mealworm soon tames them, and, with a little perseverance, they will feed from the hand.

One warning; however, do not attempt to catch these birds unless it is absolutely necessary, as a slight pull and their beautiful tail is lost, and the beauty of their nuptial garment sadly marred for the season.

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The Breeding of Hooded Siskins and Cross-bred Goldfinches

By the Rev. J. M. Paterson, M.A.

I have had a very gentle reminder from our courteous Editor that my name has not figured amongst our contributors lately, so I am trying to write something which may be of interest, and perhaps of help to our readers.

About the middle of June I turned out into my largest aviary a pair of Hooded Siskins, and a pair of Goldfinches. The cock Goldfinch is a very fine English bird, which has won me several prizes, including a silver cup. The hen bird is a Himalayan which I obtained from Captain Perreau, and which he and I thought was cock bird, when I purchased it. Each pair commenced building at once, and the third day after being turned out the Goldfinch laid its first egg, and the following day the Hooded Siskin laid her first egg.

Hybrid Goldfinches: The Goldfinches built a very small, frail nest in some Clematis montana, as high up as they could well get; and the Hooded Siskins built a firm, strong nest in a tangle of hops and clematis, against one of the posts, supporting the centre of the aviary, about three feet above the ground.

In each case, as far as I could see, the hen birds did did all the building, the cock birds merely accompanying the hens and taking a protective interest in their work. Each nest was built entirely of grass, the lining being of soft, fine grass, no hair or down being obtainable in the aviary.

The Goldfinches laid five eggs, typical in shape and colouring and slightly larger than the ordinary English birds' egg. This was to be expected, because the Himalayan Goldfinch is a rather bigger bird than the English one. Four eggs were hatched, the first young one making its appearance on the 14th day. The next day the three remaining youngsters appeared.

The hen Goldfinch sat very close the whole period of incubation, coming off occasionally for a very short period, hardly exceeding one minute. The cock bird fed her constantly whilst she was on the nest, and, as far as I could make out, she only left the nest whenever she wanted to evacuate. No droppings were to be seen under, or about the nest during the period of incubation. I provided plenty of mixed seeds, hemp, inga teazle, linseed, and lettuce; also large handfuls of groundsel in flower and in seed, dandelion heads, and lettuce. Seeding plaintain and burdock was growing abundantly in the aviary, and the birds ate freely of the seeds and the leaves. I also gave Hartz Mountain Bread dry, with maw seed sprinkled on it; also a small piece of bread, every morning, soaked in boiled milk.

The parent birds went hunting around the aviary for insects, and found a fair number of midges, flies, and spiders, with which they fed the young birds for the first few days. Afterwards to my great satisfaction they started feeding with bread and milk. On this diet they have successfully reared two young Goldfinches, which are now (July 18th), three weeks old—and are out of the nest, though unable to fly. An Indigo Bunting is greatly interested in these two young birds, and has been seen to feed them.

HOODED SISKINS: The history of the young Hooded Siskins is not so happy. They hatched out on the 14th day and the parent birds fed on bread and milk, maw seed, and live food caught in the aviary. They did not touch the groundsel or dandelion heads, but tucked into the burdock seeds pretty freely. I noticed no green food in the crops of the young Siskins till the 10th day. They died on the 11th, and 12th days and their crops were full of green food, chiefly burdock leaf, as far as I could make out. The parent birds have built another nest, and, as the hen has been on the nest a good deal, I am expecting to see an egg there soon. The eggs of the Hooded Siskin have been already described, so I have not given another description. Last year three eggs were laid by this same pair, and the four eggs laid this year (of which three hatched out) make a total of seven, which I have examined. These varied as much as a clutch of blackbird's eggs might do. One egg had a circle of smudgy spots round the *small* end, two had similar circles round the big end, and the rest had no circles round either end, but tiny dark spots, mostly at the big end. The general colour of the eggs was a dingy pale green.

This experience has been satisfactory to me, as it has showed me that wild birds kept in an aviary will sometimes feed with bread and milk. I have often tried it before, but I have never as yet known any birds but Canaries to feed their young with it.

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Breeding of the Orange-cheeked Waxbill.

By J. Goodchild.

At our Editor's suggestion I am penning these few notes of aviary episodes this season, and trust they may prove of interest, though the successes are more a matter of luck than judgment.

Orange-cheeked Waxbill (*Sporaeginthus melpodus*): These are very pretty if common birds, nevertheless I was very pleased to succeed with these charming Waxbills. Some aviculturists may possess elaborate aviaries and with the best of care and management meet with but little success—while others like myself have only small outside places, not good enough to be termed an aviary, yet meet with a fair amount of success. I have only kept birds about four years or so, at first starting with Canaries, but after a year replaced these by Foreign species, beginning with a few of the cheap and common kinds.

Early last year I bought a dozen mixed Waxbills, including a pair of Orange-cheeks, but these all died during the summer except a pair of Cordon Bleus and two Orange-cheeks, which turned out to be a true pair. They passed the winter out of doors, and spring found them in fine fettle.

Early in May I found they had built in a small rush-nest, and looking in saw two eggs; after this they took no more notice of the nest or eggs, so I removed them.

A few weeks later they began using the same nest, so I decided to leave them alone, and thought little more about them. On June 13th a friend from London (a Canary breeder) called to see me, and showing him round I took down the nest to show him, then I found it contained some young birds, which were alive and had been fed; they were very small and could not have been more than two days old. I looked in the nest most days and found they were growing, also that they were being well fed. When they were about a week old I looked in the nest and found them all on their backs, and all I could see was their breast bones and I should have thought them dead, but for their very palpable breathing.

On July 1st I found them out of the nest, but unable to fly; to-day (July 7), they can fly well and are on the branches in the outside flight.

The day before I discovered the young in the nest I noticed the parents catching insects and this was the first time I had observed them doing so; thus it would appear probable that the young were hatched on that day, viz., June 12. The young were reared on seed and greenfood (except such insects as their parents caught in the aviary). I did not supply any soft food.

In colour they resemble their parents, but lack the orange patch on their cheeks and have black beaks. They are continually jerking their tails in true Waxbill-fashion.

DIAMOND SPARROWS (*Steganopleura guttata*). I am also delighted to have young of this species fending for themselves, and the old birds are incubating another clutch of four eggs.

ZEBRA FINCHES (*Taeniopygia castanotis*). These are busily engaged in feeding young in the nest.

GOULDIAN FINCHES (*Poephila gouldiae*): Like the majority of aviculturists I cannot get on with these. My present pair I have had for about eighteen months (last year they moulted well) but are now in full moult, and I cannot say whether they will get through; the hen looks very dull. They have made no attempt to nest.

Green Avadavats (*Stictospiza formosa*) have made no attempt to nest. Cordon Bleus (*Estrilda phoenicotis*) have built but have not got as far as eggs up to the present.

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A Small Aviary and its Inmates.

By Mrs. E. Stanley Gardiner.

In reading the monthly issue of *Bird Notes*, I have been struck by the reticence shown by the owners of really small aviaries. In the hope that others may follow suit, I send a few facts about my own little ventures in aviculture.

My aviary consists of a brick-walled room of very small dimensions, with an ordinary casement window in it giving access to a covered flight 5 x 8½ x 11 feet.

The roof of this flight is felt-covered match-boarding, and the three free sides of the flight are of wire, half-inch mesh. The floor of the shelter is tiled, and that of the flight is ordinary garden soil, which is frequently dug over—(the subsoil is gravel). Climbing roses are planted on the *outside* of two sides of the flight. I find it useless to plant anything inside. Every spring I fill the corners of the shelter and of the flight with a dense mass of dead whitethorn, privet, pea sticks, etc., to give cover, and these remain undisturbed for the year. In addition I hang up wooden boxes, coco-nut husks, travelling cages, flower-pots, and anything else which seems possible as a nesting site, and throw down dried moss, green grasses, bay, frayed felt, and shavings for building material. I find that I have to renew it frequently, or the birds pull each others nests to pieces. In my experience it is useless to hang the boxes at a lower level than that of my own head. If I have the birds nesting above this level, I can enter the aviary and flight many times a day for feeding and cleaning, without the sitting hens troubling to get off the nests.

Now for the inmates. Like all bird fanciers, I must confess to overcrowding. As I have to breed Canaries and mules in the same aviary as the foreigners, this crowding becomes acute during the breeding season. As I have stated, I keep the nesting accommodation for foreigners above the 5ft. 4in level. Below this I have four large double breeders for the Canaries; the young birds, however, have to be turned out into the flight as soon as they are independent.

My choice of birds is limited in many ways. Firstly, price; secondly by the fact that I use no heat, winter or summer; thirdly, in that I only keep seed-eaters; and fourthly, by the fact that I wish to keep only such birds as will breed in my aviary. I keep to the last named restriction because I think that breeding is the only true criterion of suitable conditions in captivity.*

The following species have reared young successfully with me: Zebra Finches, Bengalese, Parson Finches, Java Sparrows, Olive Finches, and Canaries (London Fancy); Goldfinch-Canary, and Twite-Canary.

Hatched, but not reared to independence: St. Helena Seed-eaters, and Cut-throats.

Laid eggs: Red-headed Finches, Bullfinches, and Striated Finches.

I have tried three times to acclimatise Gouldian Finches, but have never got them over their importation sickness. I have had Cordon Bleus and Lavender Finches, but found they did not winter out of doors. Mannikins, several Waxbills, and Spice-birds did not breed and were therefore given up.

The aviary has a southern aspect, but is exposed to strong winds. In winter I sometimes have to break the ice in the water pots several times a day.

I give a very mixed seed diet. There is always Canary, millet, hemp, rape, teazle, linseed and oats, in the food trays. Green food in variety and abundance is supplied daily, a little food, crumbled dog biscuit, etc., during the breeding season, and in very cold weather; also fresh ants' eggs and green fly in summer. Ordinary tap water is used and changed twice daily.

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*This is only the limitation of a given aviary, as *suitable* accommodation can be provided for almost every species of birds the aviarist may specialise in.—Ed.

I have had to give up some birds, owing to their interfering habits. My Parson Finches were my favourites of all, but they made a practice of spending one night in every nest in the aviary before settling down to true family life, and I lost several nests of other birds in consequence. My Parsons reared apparently entirely on fresh ants' eggs; I never saw other food taken to the nest. Most birds like the ants' eggs, but the Olive Finches will not look at them, and rear their young when possible on seeding grasses and green-fly. I have replaced the Parsons by a newly-imported "pair" of Aurora Finches, which, I fear, are both cocks.

At the present time the aviary contains fifty-three birds, only seven of whom are caged. Of these, twenty-three are this season's young ones, but all are independent. In addition I have Canaries; Olives, Zebras, and Red-headed Finches incubating again.

In my opinion, such success as I have had is due largely to the height of the aviary, which seems to give the birds a sense of security. In the case of the foreigners, as distinct from Canaries, it is quite possible to note the exact period of incubation, feeding, etc., without actually looking into, or touching the nest, and the birds much prefer to be out of reach.

I find the shelter very little used for breeding. The Javas, however, invariably nest there, and the Olive Finches used it for their first brood, but preferred the flight afterwards.

I hope to increase my stock of foreign birds next year, when I shall have a somewhat larger aviary. But I still intend to keep only such birds as will breed.

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Nuthatches.

By Captain J. S. Reeve, F.Z.S.

The following may interest "B.N." readers: As I was anxious to procure a clutch each of Nuthatches' and Cole Tits' eggs I put up eighteen nesting blocks about February. Most were occupied by Blue Tits, but two were claimed by Great Tits, and one each by Nuthatches and Cole Tits. Several failed to find tenants! On examining all these boxes at the end of June, I found one nestful each of great and Blue Tits apparently fully fledged, but all dead. I cannot account for this! Well all this by the way: after I had taken the Nuthatch's eggs (8) on May 7th (the Cole Tit laid 11), a Nuthatch commenced to build in another of my empty blocks attached to a big cedar tree, just opposite my study window, about four days later; I take it to have been the same pair. The first nest took quite a fortnight to make; indeed I think it must have been well over a month from the commencement till incubation began. Well, to continue my story proper, the second nest apparently only took about a week, and both were composed of thin bark and leaves, mud being used round the hole and inside the top of the block under the lid. When I looked at the nest on June 9th, before leaving for a fortnight's absence from home, she was sitting. I returned home on June 27th, and looked at the nest on the 29th; it contained five young birds, fully fledged, and the the old birds might both be seen feeding constantly, the young ones putting their heads to the entrance to receive the insect; I perceived that they constantly brought something of a creamy colour, which, it struck me, must be a medium-sized moth of some description. On the afternoon of July 1st I got my glasses and hid in some bushes within four or five yards of the nest; I failed, however, to identify any of the things brought, partly for this reason, that 1 had not been there more than half an hour before one young bird left the nest and sat on top of the box; it flapped its wings once or twice and then started to climb, took a circular flight over the lawn back to the tree and then across to a laburnum; So much for No. 1. No. 2 flew straight out of the block to the laburnum (across a path six yards distant). No. 3 was on the outside of the block, when a boy walked past and it flew into the bushes close by me. Nos. 4 and 5 ran up the tree. The following remarks apply to all generally; the bird about to leave the block kept poking its head out and calling for ten minutes or a quarter of an hour previously, holding on to the inner edge of the hole meanwhile; once the body came out there was no going back, it was out and appeared to rejoice at the freedom, though naturally a bit shaky holding on, indeed they seemed stronger on the wing than the leg. While looking out they pecked at insects which flew past or settled near the hole and appeared to begin feeding directly they got out on the tree, but, they were fed by the old birds at all stages of the departure, even the last being fed while still inside, and some of them directly they got out. There appeared to be no attempt of any kind on the part of the old birds to entice them out, nor any anxiety when they came out, except when they appeared in difficulties and likely to flutter to the ground one old bird always came to them. As near as possible there must have been a quarter of an hour between the exit of each. I certainly selected a lucky moment to watch them! They continued calling and being attended by the old birds after they got up in the tree.

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Where There's a Will There's a Way.

By The Hon. Mary C. Hawke.

It may prove of interest to some of my fellow aviculturists to hear that I have reared a young Black and Yellow Hawfinch (*Mycerobas melanoxanthus*).

My birds came from the Cordoba Hills, Argentina, and were sent me by a friend last June. Six were sent of which five lived, but alas! there was only one hen among them.

During the winter they were kept in an unheated room and put out in the Spring. The true pair going into one division of the aviary, and one cock into the other, which contained a mixed lot of foreign birds—the other two cocks I put in a large cage by themselves; they are all very tame.

In June the pair built a nest of hay in a square open box hanging in their enclosure. I put in the hay and the hen just carried bits about in her beak and shaped the nest. She laid one egg very like a Blackbird's in colour, but would not incubate, so I gave it to a hen Bullfinch who was incubating infertile eggs in the same aviary. She hatched it out, but would not feed the chick; it was very thin and about two days old, and I decided to transfer it to a wild Hedge Sparrow's nest in which a clutch of eggs were being incubated. She fed it and I gradually removed her eggs. After six days I brought it indoors and hand-reared it—it is now (August 1st) a nice bird and doing well.

The old hen nested again and laid a clutch of three eggs, which she steadily incubated, hatching out all three, but she never gave them enough to eat, and although I left but one for her to attend to, it died owing to being insufficiently fed, though living some days. The parent only gave the young one mealworms, which they took at my feet.

A hen Canary was rearing one of this brood, which was doing well, but when six days old, a small tin of egg-food fell upon it and shortly afterwards it was dead.

The hen Hawfinch is now carrying bits of hay about and the cock is singing to her.

[The title is ours—it would be of general interest if Miss Hawke would describe how she fed the young one which has been successfully reared.—Ed.].

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Editorial

Zoo Notes: Among other interesting acquisitions, during a recent visit we noted the following: Indian Fire-caps*‡ (*Cephalopyrus flammiceps*), Scarlet-breasted Robin* (*Petroica leggei*), Blue Wrens‡ (*Malurus cyanochlamys*), Swainson's Hawk (*Gampsonyx swainsoni*), Blue-headed Rock-Thrush‡ (*Petrophila cinclorhynchus*), Golden-throated Barbet‡ (*Cyanops franklini*), Yellow-tufted Honey-eater‡ (*Ptilotis auricomis*), White-plumed Honey-eater (*P. penicillata*), White-cheeked Honey-eater (*Meliornis nigra*), etc.

The following species have also recently reared young in the Gardens:—

2 Red-bellied Thrushes (*Turdus rufiventris*).
1 Green Cardinal (*Gubernatrix cristatus*).
4 Snow Finches (*Montifringilla nivalis*).
1 Carolina Duck (*Lampronessa sponsa*).
1 Mandarin Duck (*Aex galericulata*).
2 Hybrid Snow Geese (*Chen caerulescens* × *C. nivalis*).
1 Yellow-billed Duck (*Anas undulata*).
6 Common Teal (*Nettium crecca*).
1 Red-crested Pochard (*Netta rufina*).
1 Naked-eyed Pigeon (*Columba gymnopthalma*).
4 Greater Black-backed Gulls (*Larus marinus*).
1 Dominican Gull (*L. dominicanus*).
3 Herring Gulls (*L. argentatus*).

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* New to the Collection.

‡ Presented by Mr. A. Ezra.

1 Black-footed Penguin (*Spheniscus demersus*).
Also numerous Pheasants and Quails.

NESTING NOTES: Results still continue to be fairly good but sufficient members do not send in notes. The following are in addition to those already announced:—

WM. SHORE BAILY, Westbury.

Young in nest: Vinaceous, Aurita, Diamond, Bronze-wing, and Brush Bronze-wing Doves; also hybrid Black-headed Mannikin × Bengalese, and Abyssinian × Dwarf Weavers.

Several species are also still engaged in incubation.

DR. L. LOVELL-KEAYS, East Hoathley.

Young on wing: Red-rump and Passerine Parrakeets, Cockateels, Diamond Finches, Bronze-wing Mannikins, and Red-crested Cardinals, also Cactus Conures.

CAPT. J. S. REEVE, Leadenham.

Young on wing: Cuba Finches.
Young in nest: Bib Finches.

H. BRIGHT, Cressington Park.

Incubating: Siberian Waxwing (3 eggs),
Young on wing: Zebra, Diamond, and Cuba Finches; Red-Mountain, Violet, and Peaceful Doves; Hybrid Grassfinches (*Poephila acuticauda* × *hecki*).

C. E. CROKER, Farnham.

Nesting: Pekin Robins.
Young in nest: Cockateels, Budgerigars, Canaries, and Zebra Finches.
Young in nest: Several Quaker Parrakeets which are frequently seen pushing their heads out of the large nest.

R. HOFFMANN, Streatham.

Young on wing: Three Parrot Finches; another vigorous brood in nest.

W. A. BAINBRIDGE, Thorpe.

Young on wing: Jacarini, Red-headed and Zebra Finches.
Incubating: Blue-breasted and Gold-breasted Waxbills; Cuba, and Scaly-headed Finches; Long-tailed Grassfinches, and Diamond Sparrows.

M. R. TOMLINSON, Inveresk.

Young on wing: Tree Sparrows.
Hatched but not reared: Siberian Bullfinches.

SILVER-EARED MESIA (*Mesia argentauris*): In Mrs. Connell's aviaries at Brockenhurst, a young bird of this species was successfully reared up to the point of leaving the nest, and was on the wing for three days afterwards, but it did not live to fend for itself. We think this is the nearest point to actual success that has yet been achieved.

Sikhim Siskin (*Chrysomitris spinoides*). Mr. W. E. Teschemaker has had two broods of this species successfully reared in his Teignmouth aviaries; also Spotted Flycatchers.

An Enquiry: Can any member inform us of any instance of Sharp-tailed Finches (*Uroloncha acuticauda*), and Cactus Conures (*Conurus cactorum*) having successfully reared young in captivity? If so, we should be glad to receive details.

Errata: The title "Purple Sugarbird" to plate opposite page 240, in July "Bird Notes" is an error, it should be *Purple Sunbird*; also on page 264, line 10, "Greenfinches" should read *Grassfinches*.

Notice: We regret not issuing a coloured plate with this number, one will be issued with September "Bird Notes," and the usual number will appear in the course of the volume. In reply to several enquiries the plate "Speckled Conures," distributed with June issue, was by Mr. H. Goodchild.

The Genus Brotogerys: Dr. Lovell-Keays has found this genus, of which he has six or more species, "spiteful and vicious brutes, and that they have no more mercy for other genera than they have for their own." Guiana Lovebirds, Banded Parrakeet and Black-cheeked Lovebirds, all species which are well able to look after themselves, have fallen victims to their violence. This confirms others' experience.

◆

Correspondence.

BREEDING RESULTS—1914.

Sir,—My results for this season are as follows:

Budgerigars: Only 4 young from 2 pairs.

Canaries: 4 young from 2 pairs.

I put these poor results down to the very dry season, damp, being essential (in my opinion) to fecundity.

Silverbills: 6 young.

Bengalese × Silverbill: 1 young.

English Goldfinch × Himalayan Goldfinch: 2 young, alive and well. Parents nesting again.

Hooded Siskins: 3 young, all died. Parents laid again.

Green × Grey Singingfinch, built and laid, but no young hatched.

Long-tailed Grassfinches: 4 young, all died (I fancy owing to the heat).

Zebra Finch × Longtailed Grassfinch: On eggs.

Chaffinch × Greenfinch: 4 nests, all eggs clear.

J. M. PATERSON,

Hollington,
July 17, 1914.

NESTING NOTES FROM WOBURN ABBEY.

Sir,—The following notes on the breeding season, here, may be of sufficient interest for publication.

Manchurian (*Grus japonensis*), and White-necked Cranes (*Anthropoides leucauchen*) have young about half-grown.

Stanley Cranes (*Anthropoides paradisea*). A promising young one is being hand-reared with the assistance of a hen, but at the time of writing is only two days old.

Sarus Cranes (*Antigone antigone*). Two chicks were hatched but were killed by other birds.

Darwin's Rheas (*Rhea darwini*). Chicks have been hatched and an attempt is being made to bring them up with domestic fowls as foster-mothers. Unfortunately they are not doing very well, as the species is one which it is extremely difficult to rear by artificial means.

Black-necked (*Cygnus nigricollis*), and Bewick's Swans (*C. bewicki*) have young about half-grown.

Hutchin's (*Branta hutchinsi*), and Emperor Geese (*Philacte canagica*) have been fully reared.

Pink-footed Goose (*Anser brachyrhynchus*) believed to be incubating.

My Parrakeets at liberty have done well this season:—Red Rosella, Mealy Rosella, Barnard's, Red-rumps, Adelaides, and Pennant's have all bred, and the young have left the nest, the last mentioned, curiously enough, being in almost full adult plumage and showing only a very few green feathers on the back.

In my aviaries, on the other hand, I have been singularly unfortunate.

Stanley Parrakeets (*Platycercus icterotis*) hatched young but failed to rear them.

Bourke's (*Neophema bourkei*) and Barraband's Parrakeets (*Polytelis barrabandi*), and Blue Budgerigars (*Melopsittacus undulatus* var. *caeruleus*) all had infertile eggs.

At the time of writing a hen Bourke's Parrakeet is the only aviary bird engaged in incubation.

Wonga-wonga Pigeons (*Leucosarcia picta*), Australian Crested Doves (*Ocyphaps lophotes*), Peaceful Doves (*Geopelia tranquilla*), and Bronze-necked Wood-Doves (*Haplopelia larvata*), have all bred at liberty.

(Lord) TAVISTOCK.

Woburn Abbey,
July 17, 1914.

FIELDFARE × MISSEL THRUSH HYBRIDS, ETC.

Sir,—In response to your enquiry, I am very sorry to tell you that the Missel Thrush and Fieldfare failed to rear the two young ones. They lived for eleven days and could not have had better parents, whose one fault seemed to be over feeding. The young ones grew rapidly, but on the eleventh day one was picked up dead twenty yards from the nest, while the other was dead in the cartridge box in which the nest had been built. They appeared to be well nourished and showed no signs of a violent death. I have been forced to the conclusion that when birds nest under the somewhat unnatural conditions of an aviary, they lose their brains. Grey and Yellow Wagtails and Larks; Gold, Bull, Green, and Bramble Finches; Siskins; Ring Ouzels; Chaffinches, etc., all nest, but almost invariably desert or let their young die during the second week.

The Silky Cowbird has been a great nuisance this year with her Cuckoo-like habits of dropping one of her large eggs in nests of Gold Finches, Siskins, Hedge Sparrows, etc. FRANK JOHNSON.

Hove, 4-vii-'14.

[It would be most interesting if Major Johnson would describe the eggs of the Silky Cowbird and state if they varied to any extent in the respective nests.—Ed.].

AN INTERESTING OBSERVATION.

Sir.—On the evening of July 30th, while walking across some fields, my attention was attracted by a loud and continuous screeching, and on looking up I noticed thousands of Swifts circling above my head at all altitudes from fifty or sixty feet, to some hundreds of feet up. The wind was light and easterly in direction, and the time 6 p.m. The Swifts extended in a northerly direction as far as the eye could reach, and were apparently moving in a South-easterly direction towards Eastbourne, which is about twelve miles distant from the place they were seen at.

After gazing in wonder at such a vast concourse of birds, I wended my way westwards and rapidly passed out of the belt of birds, and saw no more until retracing my route homewards and to the north, when at 7 o'clock I saw about twenty or thirty circling very high up, but rapidly disappearing towards Eastbourne to the south-east. Finally at 7-5 p.m. I saw the last two Swifts that evening, and they too rapidly disappeared in the same direction.

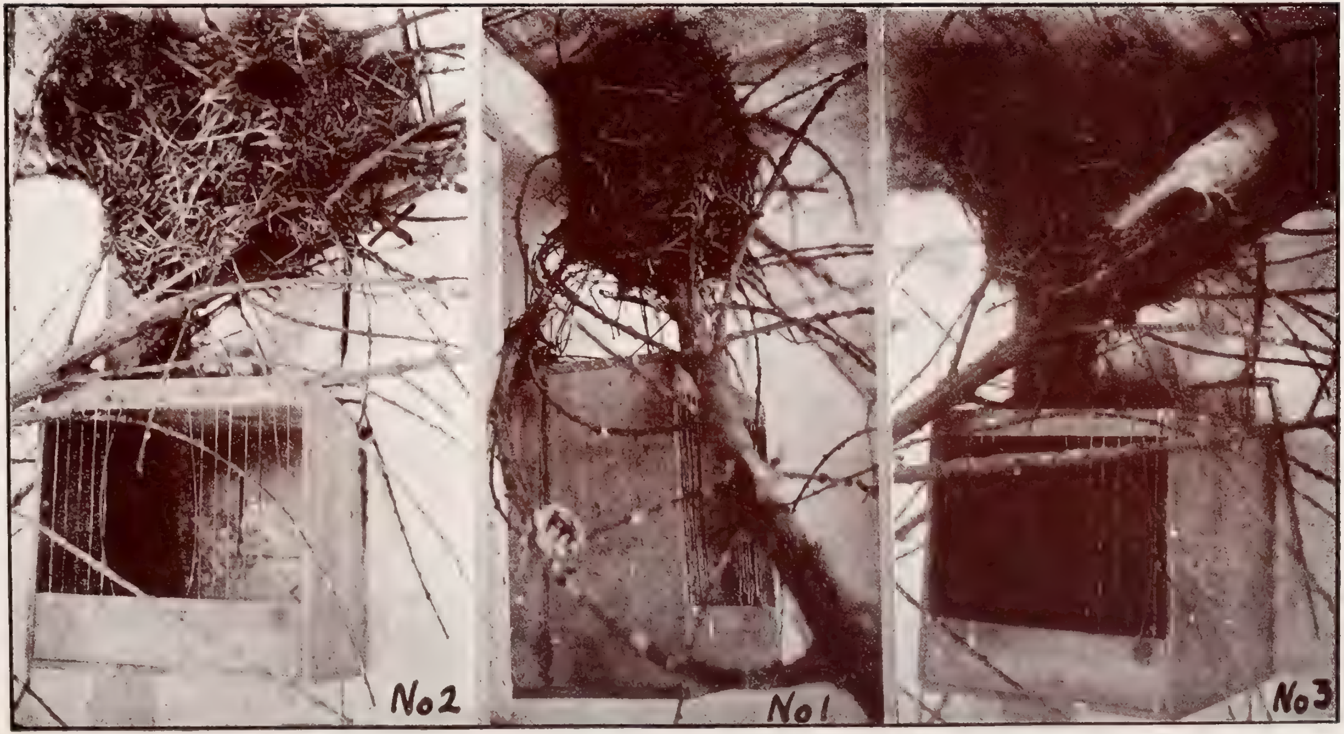
An interesting feature was that I never remember being so bothered by small flies while riding my motor-bicycle. There were myriads of them and they nearly formed a cloud in the air.

Can this be the summer migration of Swifts? If so it is earlier than usual. L. LOVELL-KEAYS.

AN INTERESTING NEST.

Sir.—I am sending you photos of a nest of the Black-headed Weaver (*Hyphantornis melanocephalus*), which may prove of some little interest.

This nest was woven over a Canary's nest, while incubation was going on, but the Canaries continued their duties uninterruptedly.



Nest of Black-headed Weaver (*Hyphantornis melanocephalus*).

No. 1 shows the nest as first constructed with entrance hole at side. When young birds were hatched out, the Weavers, closed up the hole in the side, and formed a sort of double barrelled hole in front, as shown in photo No. 2.

No 3 depicts the Canary about to enter the nest to feed her young; unfortunately complete success was not attained as she let her young die when about ten days old. WM. SHORE BAILY.

Westbury, 15-vii-'14.

British Bird Calendar.

Brief notes on Migration Movements, rare visitants, uncommon nesting occurrences and general field notes for this calendar should reach the Hon. Editor not later than the 28th of each month. The co-operation of all is solicited.

NOTES FROM NORTH UNST LIGHTHOUSE.

May 2.—Stormy Petrel at Lantern.
„ 3.—10 Ravens and 1 Grey Wagtail.
„ 4.—2 Wheatears and 1 Pied Wagtail.
„ 5—6.—Numerous Pied and Grey Wagtails.
„ 7.—Whimbrel, and 6 Curlews.
„ 11.—2 Terns, 1 Snow Bunting and 1 Kestrel Hawk.
„ 12.—1 Starling, and first Richardson's Skua for season.
„ 13.—Wheatear.
„ 16.—Great Black-backed Gull devouring a Puffin; Common Sandpiper. and numerous Richardson's Skuas.
„ 21.—Fulmar sitting.
„ 22.—First Puffin's egg; Oyster Catcher's nest and two eggs.
„ 24.—Herring Gull's nest with two eggs.
„ 30.—Kittiwakes commenced building.
„ 31.—Manx Shearwater.
June 2.—Albino Puffin, also seen on the 6th.
„ 3.—5 Terns.
„ 5.—1 Coot on Water.
„ 7.—First Young Shags.
„ 9.—2 Sparrows.
„ 10.—2 House Martins at Lantern.
„ 11.—2 Swallows, also 12th and 13th 13 Swallows.
„ 13.—1 Wheatear.

Per D.E.P., Southsea, 11/7/'14.

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Nesting Notes *(continued from page 276).*

E. J. Brook, Ecclefechan.

Young in nest: Red-crested Touracou (*Turacus erythrolophus*), and Fair Lory (*Charmosynaopsis pulchella*).

Miss M. Bousfield, Bournemouth.

Young on wing: Zebra Finches.

Young in nest: Cuba, Ribbon, and Red-headed Finches; also Black-cheeked Lovebirds.
Incubating: Melba Finches.

W. A. BAINBRIDGE, Thorpe.
Young in nest: Indian White-eye, and Red-headed Finches.

WM. SHORE BAILY, Westbury.
Young on wing: Two Dwarf Weavers.

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The Black Tanager *(Tachyphonus melaleucus).*

BY WESLEY T. PAGE, F.Z.S., ETC.

This is just a short note to fill a vacant space at the moment of going to press.

In my aviary a pair of this species have done well during the past four years, and their behaviour, if not exactly exemplary, has been mostly an attitude of non-interference with the other occupants while fully looking after themselves.

In the hen bird the mother-feeling has been very strong, so much so, that lacking young of her own to look after, she would insist, on assisting other soft-billed species to bring up theirs, fighting for this privilege if denied -several promising young birds have been lost from her interference.

In 1911 and 1912, she would not build a nest, although several clutches of eggs were laid in wood boxes, nothing came of them, all but one being addled, presumably from rolling about on the bare wood, one hatched out, the chick living but one day.

In 1912 no nest was built, but from a series of clutches one young bird was hatched out and fully reared, living two months after fending for itself; but, it moulted very late, and died in the midst of it.

This year they have nested twice; on the first occasion a rush nest was chosen, but no material was carried in, and from a clutch of three eggs one bird was hatched out and fully reared, but was slaughtered by its father about ten days after it began to fend for itself. This tragedy, I think, arising from the facts that the old birds went to nest again, before it (the first young one) was out of hand, and later when it was "on its own" insisting on sleeping in the nest with the incubating hen.

This time the hen built an open cup-shaped nest, in an open barrel (provided for Doves), right at the back. I do not know how many eggs were laid, or how many young there are, certainly not less than two and very lusty ones, too, if we may judge by the noise they make, being now about nine days old.

I may enlarge more upon the doings of this pair of birds at a later date as they have interested me much by their individuality.

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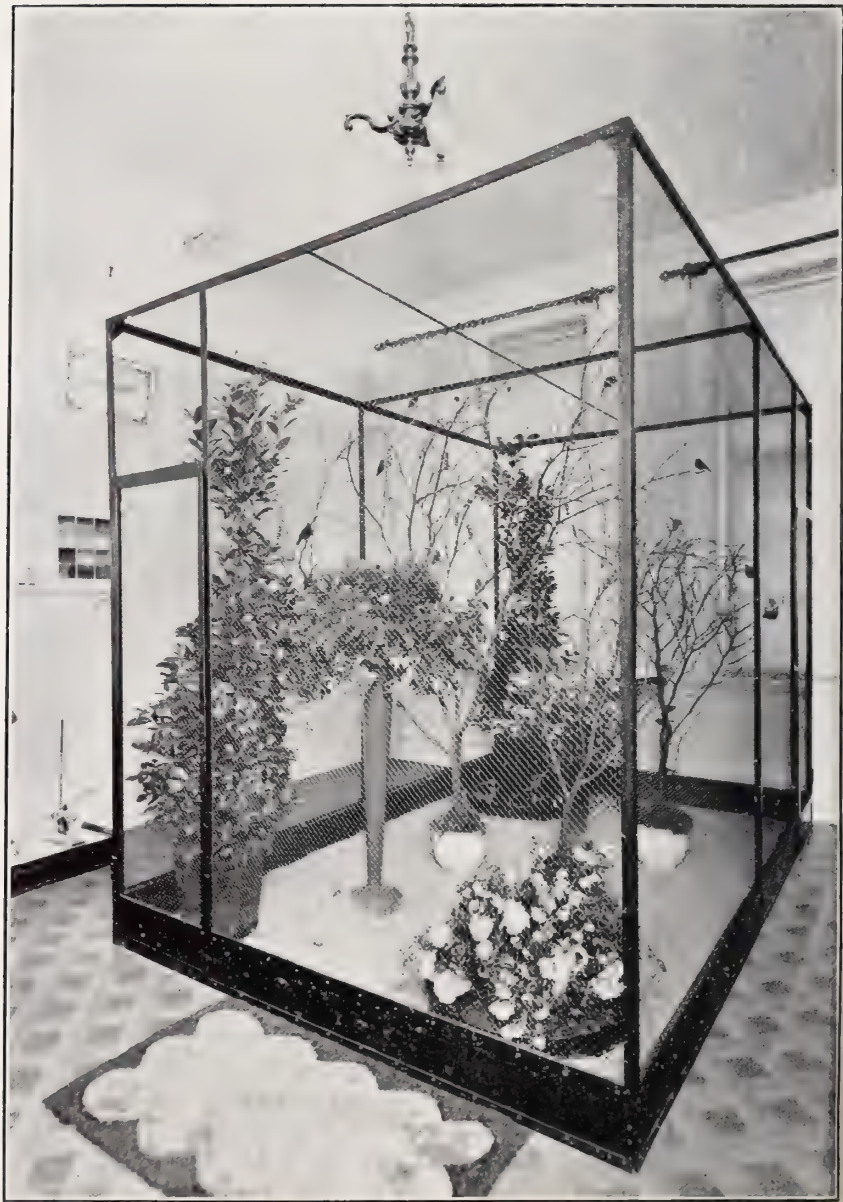
Post Mortem Reports.

None to hand at time of going to press.



Mr. A. Ezra's Sunbirds' Aviary.

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BIRD NOTES:

THE

JOURNAL OF THE FOREIGN BIRD CLUB

A Sunbirds' Aviary.

By WESLEY T. PAGE, F.Z.S., ETC.

A glance at our frontispiece will convince "all and sundry" that there are no limits to aviculture, for here in a Hyde Park flat, our member, Mr. A. Ezra, has triumphed over all difficulties, and within the walls of a sunny room has an aviary, which is a veritable paradise to the dainty "feathered exquisites" which occupy it.

I have been privileged on several occasions to see Mr. Ezra's birds, and the wonders that his untiring and solicitous care achieved with them, when only kept in roomy cages, is too well known to our readers to need repetition here the teams he has placed upon the show bench, at the Horticultural Hall and other places, are an irrefutable testimony to his skill, beside which words are empty vain things.

The aviary, however, is a creation of the year and though the writer had seen it in the course of construction, it was on a Monday evening at the end of June, when, in company with our members, Capt. J. S. Reeve and Mr. A. Sutcliffe, that he saw it in all its completeness, garnished with living plants, huge bunches of blighty foliage, ditto of flowers and, over and above all, the fairy-like and minute bejewelled "feathered exquisites" which formed its chief glory, of which I now append a list.

Indian Species :—

Amethyst-rumped (*Arachnechthra zeylonica*).
Purple Sunbird (*A. asiatica*).
Purple Sunbird—(Green variety).
Red Yellow-backed Sunbird (*Aethopyga seheriae*)
Black-breasted Yellow-backed Sunbird (*Ae. saturata*).
Nepal Yellow-backed Sunbird (*Ae. nipalensis*).

African Species :—

Southern Malachite Sunbird (*Nectarinia famosa*).

Black or Greater Amethyst Sunbird (*Cinnyris amethystinus*).
Greater Double-collared Sunbird (*C. afer*).
Lesser Double-collared Sunbird (*C. chalybeus*).

It will possibly be of interest here to give short sketchy descriptions of the above species, omitting the Purple and Amethyst-rumped as being known to all. The Green variety of the Purple only differs in having its plumage refulgent with metallic green instead of purple.

The Red Yellow-backed Sunbird is a denizen of the majestic Himalayas, and may be described as Blood-red, with dull brown wings, metallic green cap, metallic blue moustachial streaks and a patch of yellow on the lower back; the abdomen is olive.

The Black-breasted Yellow-backed Sunbird also ranges the Himalayas and I cannot do better than quote Mr. Ezra's description of the bird "In colour he is black, though the back is maroon-red. Crown "of head and a narrow stripe down each side of the throat a brilliant "metallic violet-blue, with a steel-blue tail and a patch of yellow on "the lower back."

The Southern Malachite Sunbird is large compared with the foregoing species, having a total length of $9\frac{1}{2}$ inches, of which the tail measures 5 and the bill $1\frac{1}{4}$. The general colouration is refulgent malachite-green, suffused with gold on the head, neck, back and breast, and glossed with blue on the abdomen; pectoral tufts yellow; eye spots, greater wing-coverts and flights black. Iris deep brown, bill, legs and feet black. Its habitat is South Africa, ranging as far north as the Zambesi and Shiré River valleys.

The Black or Greater Amethyst Sunbird ranges over Cape Colony, Natal, Zululand, Swaziland and the Transvaal, extending as far north as the Limpopo River. The general colouration is a soft velvety black shaded with purple, centre of crown glistening metallic-green; cheeks, throat, lesser wing-coverts and upper tail-coverts metallic violet-purple to coppery-red according to light refraction. Iris deep brown; bill, legs and feet black. Total length $5\frac{5}{8}$ inches, of which the tail measures just over 2.

The Greater Double-collared Sunbird is pretty generally distributed over Cape Colony, but is somewhat local in its distribution, and the same applies to its haunts in Natal and the Orange Free State. The general colouration is rich metallic-green, with the greater part of the breast scarlet, separated from the green throat by a narrow band of glistening blue; pectoral tufts yellow; abdomen, flights, and under tail-coverts ashy-brown; greater wing-coverts and quills dark brown. Iris deep brown; bill, legs, and feet black. Total length $5\frac{1}{2}$ inches, of which the tail measures $2\frac{1}{4}$.

The Lesser Double-collared Sunbird is very similar to the preceding species in colouration, but is smaller, and has the scarlet breast-band or collar much narrower and of a darker hue. Total length 5 inches, of which the tail measures barely 2. It ranges over Cape Colony, Little Namaqua Land, Natal, Zululand, Orange Free State, Transvaal, and Matabeleland, being more or less common in all these provinces.

It will be readily understood that the picture of these birds, radiating forth, as they do under the play of light, every hue of the rainbow, can be better imagined than described—they resembled flashing jewels as the glistening metallic-hues of their many-coloured garments passed before our vision—in the roomy flight illustrated in our frontispiece. One can only liken it to lightning-like gleams of flashing scarlet, green, blue, yellow, etc., as they disported themselves amid the branches, foliage and flowers of their palatial abode.

The aviary is, I think, 10ft. long, 6ft. wide and 7ft. high, and can be divided by a roll-up wire partition when required. In the photo the perspective is rather acute, but this was unavoidable if the whole of the aviary was to appear. The birds were quite at home, not at all scared by spectators, or Mr. Ezra's presence in their midst, and we were not only able to gaze entranced upon the fairy-like gracefulness of their deportment and flight, but also to observe their individual beauty as they rested undisturbed, or sipped heartily at the syrup supplied for their delectation.

The writer hopes that Mr. Ezra will himself, describe the birds and their demeanour, as he can do this so much more fully than a visitor passing a mere hour with them.

In cages, arranged around the sides of the room, were a number of other beautiful and rare species of which I can only give a list.

Rufous-bellied Niltava (*Niltava sundava*), Large Minivet (*Pericrocotus speciosus*), Short-billed Minivet (*P. brevirostris*), Small Minivet (*P. peregrinus*), Red-tailed Minla (*Minla igneotincta*), Himalayan Red-headed Bullfinch (*Pyrrhula erythrocephala*), Velvet-fronted Nuthatch (*Sitta frontalis*), Red-flanked Bush-Robin (*Ianthia rufilata*), Scarlet-breasted Robin (*Petroica leggi*), Blue Chaffinch (*Fringilla teydea*), Lutino Blossom-headed Parrakeet, and White-eyebrowed Blue and White Flycatcher.

My last word must be of Mr. Ezra's Humming-bird, which was perfectly at home and the picture of health and splendour in its roomy cage. It was not at all disturbed by our close proximity, and leisurely sipped the syrup provided for its sustenance; mostly it fed hovering above the food tin, its wings whirring like a propeller, but at such a speed that one only caught a misty blurr of feather momentarily, and then all was lost again in the rapidity of its movements. It was as it paused on two occasions, perching on the food tin, leisurely sipping its contents, that we were able to admire its exquisite beauty, both of form and colour. This species is the Purple-breasted Carib (*Eulampis jugularis*), and has been in captivity about six months.

Since our visit Mr. Ezra has acquired another Humming Bird (*Sporadinus riccordi*), which I am informed is doing well, though when it arrived it was in very poor condition.

I have purposely refrained from giving any detailed description of the Humming Birds, as I sincerely hope Mr. Ezra will do this himself.

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Some Experiences of Cockatoos.

Continued from page 259.

By The Marquis of Tavistock.

When spring came round Toby and Henry were given their liberty on the same day. I hoped that the former would show no more inclination to wander than on the previous occasion when she had been let out, and that the latter's extreme tameness would tend to keep him at home. For about two days we had little trouble with either, although Henry was afraid to fly down from his tree to feed; then, without warning both rose high in the air and departed in opposite directions, their cries growing fainter and fainter until they died away in the distance. For several days we heard nothing of them. Then Toby was recaptured in a starving condition about two miles away, and some time later we heard that Henry was in the possession of a gamekeeper living at a much greater distance who had fortunately rescued him from some school-children who had found him and were engaged in stoning him to death! The outlook was not encouraging, but I was still unwilling to cut the birds' wings, as Banksians in this country only appear to moult a few of their flight feathers each year. If it became necessary to pull out the cut quills to hasten the growth of new feathers, the operation would be likely to leave a lasting impression on the temper of the birds and probably on our fingers as well, so I decided to give Timmie a chance of redeeming her character before adopting so drastic a course. She did not fly clean away like her companions, but for several days after her release she kept us well occupied in following her about, as we hardly dared to let her get out of our sight. She spent her time sitting in the topmost branches of the old park trees, occasionally flying about half a mile and then calling until we came up, when she appeared satisfied and remained deaf as the poet's raven to our adjurations to "come down from that majestic oak!" She did not appear to suffer from hunger, although she ate nothing the whole time—Banksians possessing remarkable powers of fasting and being able to go for astonishing periods without food, provided the weather be warm and dry.

Finally, however, we persuaded Teddy to lend us his assistance. He came most unwillingly, plainly intimating that he only consented to be carried out to oblige his friends and not from any regard for that stupid female who might die tomorrow for all he cared! Still we got him to the scene of operations at last and by flying after us from tree to tree he soon decoyed the erring Timmie back to the garden and ultimately on to the roof of the house. Before long she flew down on the bird-attendant's shoulder and was transferred to the feeding tray, and after that the battle was won. She never gave serious trouble again and soon selected a maple tree in the stable yard as her favourite perch. Sometimes she would hardly leave it, except to feed, for days and even weeks at a time; than a wandering fit would seize her and she would take long flights of several miles, being sometimes absent for more than forty-eight hours, but never failing to turn up safe and sound in the end.

Timmie having made herself at home, I decided to have a last try with the recalcitrant Toby, and one morning released her in the presence of both her companions. She stayed well enough for a few hours, but about mid-day something startled her, and I watched her with a sinking heart vanish into the western sky. The evening, however, I heard that she had been seen, quite late, in a tree less than a mile away, so I rose next day at 3 a.m. in order to be able to watch her in case she continued her wanderings at sunrise. I waited for two hours, but neither saw nor heard her. Once, indeed, the distant cry of a Banksian reached my ears, but its repetition showed that it proceeded from Teddy, indulging in his morning flight, his deep sonorous voice being quite unmistakeable. Sadly, therefore, I retraced my steps and I had almost reached the house, when, mingled with Teddy's calls, I heard unmistakeably the voice of Toby. They soon came in view, Teddy circling above the buildings and occasionally alighting on a chimney pot and Toby in close attendance, taking wing when he did and settling when he settled. A few hours later she came down on to the feeding tray and made a hearty meal.

Of my Banksians Toby was the one who throve best at liberty. After she had been out for a few weeks her plumage was magnificent, beautifully glossy with the markings unusually distinct. Most of the day she passed in the top of some tall oak-tree, her presence being rather too often indicated by the litter of small branches on the ground beneath. In the matter of destructiveness Toby was the worst offender of the five Banksians I have had at liberty, though a young hen I bought later was very nearly as bad. Henry was not irreproachable, but he fortunately spent more of his time on the roof than in the trees. Teddy and Timmie hardly touched a twig.

Toby was the only member of the flock which was often seen on the ground, and which cared to supplement her diet of seed and monkey-nuts with green-stuff and wild fruits of different kinds. It was not unusual to see her walking about on the short turf in front of the stables, picking up morsels of grass and daisy and often continuing to feed in this way for quite a long time, until her presence was detected by a Cereopsis gander, which considered that particular patch of grass his exclusive property.

On observing the headlong approach of the disturber of her meal, Toby would spread her wings and sail lazily into a great cedar which grew close by, and from her secure perch on one of the branches would watch the ungainly caperings of her pinioned foe as he danced and objurgated on the ground beneath. When she had been at liberty some months

Toby began to show signs of a desire to nest, carefully examining large holes in trees and on one occasion effecting a sudden and unceremonious descent down one of the chimneys of the house at 4 a.m. Fortunately there was no fire in the grate and she was none the worse for her adventure, though the kitchen-maid who was sleeping in the room at the time of her unexpected entry, must, I am afraid, have received rather a severe shock to her nerves. About this time, also, Toby began to show an increasing desire for Teddy's company, following him about closely and sidling up to him in an ingratiating manner; but he, alas! was only bored by her attentions; his heart was for his human friends and for them alone.

Encouraged by the success I had at length obtained, I released Henry in the hope that he, too, had learned wisdom by his previous experiences. This time he did not leave the garden, but for several days displayed to the full that imperfect control of his wings and fear of descending which characterizes many Parrots which have spent a long period in confinement. He would call anxiously and keep looking down at us, but when after much hesitation he launched himself into the air, his courage would fail, and his wings would carry him to another branch as lofty and inaccessible as the one he had just quitted. In the end, however, he learned to fly down; and except for one occasion on which he lost his way in a thick fog, he never gave further trouble through straying as long as I had him, in fact he seldom left the immediate vicinity of the buildings. About the same time that Henry was released I received a pair of Banksians from a London dealer. He told me that they were young and I am inclined to believe him as they had a habit when alarmed of swaying their heads about and hissing in a manner suggestive of the behaviour of frightened nestlings. Their plumage, however, was very similar to that of the adults, which makes me inclined to think that the sexes are differently coloured from the very first. Both the new arrivals were shy and unfriendly and would touch nothing but canary seed—a diet not sufficiently nourishing for Banksians —and the cock was badly infested with tapeworms, of which it took many doses of cina in his drinking water to entirely rid him. After some weeks I gave the young hen her liberty and was agreeably surprised when she gave no trouble and soon followed Toby to the feeding tray. She stayed well during the course of her brief career, and of the three females it was for her, if any, that Teddy showed a preference, possibly because she did not annoy him with unmaidenly attentions, like Toby or drive him spitefully from the food as Timmie was inclined to do.

Lastly, the young cock was given his liberty. As there were already five of his kind at large, including his late cage companion, I hoped to have little bother with him, but sad to relate he most grievously disappointed me by flying clear away, and vanishing for ever! I never learned his fate. He was a serious loss as he was the only one of my three cocks from which there seemed a reasonable chance of breeding and his departure marked the turning point in the success of my experiment and the beginning of a long series of misfortunes.

The next trouble I had arose out of the increasing hostility which Henry began to display for Teddy. Both birds being extremely tame and sociable, coveted the perch on the window-sill outside the room in which the stableman and gardeners had their meals. Had Teddy asserted himself from the beginning, there would have been no trouble, but by constantly giving way to his smaller comrade, he encouraged the latter to take increasing liberties until from being at first merely neutral, he soon became actively hostile, driving Teddy savagely from his favourite post whenever he attempted to go near it, and at times chasing him round and round the buildings and refusing to allow him to settle anywhere within sight. His persecution of my old pet at length became so continuous that very reluctantly for in himself he was a charming bird—I determined to part with him. I had long looked with covetous eyes at the fine cock Banksian at the Zoological gardens, and was more than satisfied when Mr. Seth Smith kindly agreed to send him to me in exchange for Henry. In spite of the hundreds of people he had seen passing his cage, the Zoo cock had developed no inordinate affection for the human race, but had remained timid and unsociable throughout. On the other hand he was continually displaying to the hen in the next cage, bobbing his head and spreading his tail and indulging from time to time in a peculiar and not wholly unmelodious song- a kind of "coia, coia, coia, coia," rapidly repeated and lasting for several seconds at a time. So Henry departed and the Zoo cock arrived in his place. Poor Henry. I have always regretted him and if he had only treated Teddy decently, not even the vision of a nest of young Banksians would ever have induced me to give him up. However, he is still alive and seems happy in his new surroundings, the constant supply of human visitors apparently compensating for his loss of freedom. Anyone stopping to pass the time of day with him will generally be greeted with a song and a most energetic display.

But if Henry was contented with the change, it was far otherwise with the Zoo cock. The short railway journey and the strangeness of his new home upset him to a degree I should not have believed possible and for days he refused all food and uttered loud grating screams of fear when anyone approached his cage. It was only by tempting his appetite with Brazil nuts that he was ultimately induced to eat anything and it was many weeks before he appeared to have become reconciled to the loss of the Parrot House and the familiar sound of its inmates' mellow voices. It was about the middle of October that Fate began her final attack on my ill-fated flock. One afternoon the young hen was noticed to be weak and ailing and to have lost the use of her wings. I thought that she might have caught a cold and hoped to find her better after a night in a warm room. But the following day she was much worse, a watery fluid ran from the sides of her beak, and in a few hours she was dead. Post mortem examination proved her to be suffering badly from tuberculosis, which I think she contracted while in the same aviary with an old Roseate Cockatoo, which was eventually found to be badly infected with this disease.

(*To be continued*).

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An Easter Tour Among Members' Aviaries.

By Wesley T. Page, F.Z.S., Etc.

(*Continued from page 254*).

Miss Bousfield's Aviaries: An early start enabled us to reach lovely Bournemouth in good time, arriving at Miss Bousfield's, our first call, well before noon. Here we found two well appointed bird-rooms, and two well sheltered and practically arranged out-door aviaries. Being quite early in the year, most of the birds were in the bird-room, resting after the various journeys of the exhibition season, with honours gained thickly around them; but, some were already outside and nesting had already begun. The bird-rooms are heated and a comfortable temperature maintained therein during the winter season, and are well lighted—both top and side lights. The out-door aviaries are lofty and roomy, and the shelters well lighted; the furnishings consisting of abundant cover—twiggy branches and living trees and bushes, varied nest receptacles and numerous food hoppers. Miss Bousfield's success as an exhibitor is too well known for it to be needful to dwell upon the condition of the birds—it is sufficient to say that nearly all were in "exhibition trim." We noted the following, mostly in pairs:

TANAGERS: Tri-colour, Festive, Pectoral, Superb, Scarlet, Necklace, and Maroon.

FINCHES: Red-headed, Saffron, Parrot, Gouldian, Zebra, Melba, Masked Grass-, Cuban, Ruficauda, Pintail Parrot, Common Quail, and Fire-.

WAXBILLS: Black-faced, Grey, Orange-cheeked, Violet-eared, St. Helena, Avadavat, and Cordon Bleu.

ETCETERAS: Blue Sugarbirds, Rainbow and Nonpareil Buntings, Grey Java Sparrows, and Pekin Robins.

BRITISH SPECIES: Bull-, Gold-, Green-, and Bramblefinches, Linnet, Lesser Redpoll, Blackcap, Nightingale, and Yellow Bunting.

HYBRIDS: Redpoll × Canary, Goldfinch × Canary, Siskin × Canary, and Twite × Canary.

Some species are bred annually in the outdoor aviaries. After a most pleasant and interesting stay, all too short, with Miss Bousfield, her brother, and the birds, adieus were made, and we set out for Wareham our next stop.

MR. PIKE'S AVIARIES: After a most enjoyable run through lovely country we reached Wareham soon after noon, and made the acquaintance of Mr. Pike. After lunch and much avicultural yarning we went outside to view the aviaries and birds. Here we soon found that birds did not entirely absorb our host's interest, as was evidenced by a good sized Aligator, and Kinkajou, and a well appointed range of hot-houses testified to his interest in horticulture, but, much as we admired the lovely and rare flowers, exotic water lilies, etc., grouped there, it is to things avicultural our attention must be given. There were two roomy natural aviaries, given up to Budgerigars, Peafowl, Golden Pheasants, and Rufous Tinamous; the latter breed freely, and annually some are reared to maturity. The other aviaries, of which there are several, have concrete floors, both to shelters and flights, and contain little or no plant life, but have been fairly successful, as snug homes for the birds, though breeding results have not been numerous. The aviaries, however, have been well thought out and are very practical: the writer does not favour concrete floors for open flights, as rats and other rodents can be equally well kept out by taking wire netting, or concrete foundations 18in. or more, below ground level all round the aviary. Since our visit, Mr. Pike has built another aviary and increased his collection of birds--we hope he will send particulars and photos for insertion in "Bird Notes."

In these aviaries we noticed *en passant* (a full list was not made) the following species:

PARROT-TRIBE: Grey Parrot and Blue-fronted Amazon, both good talkers and in beautiful plumage; also Red-collared Lorikeet, Mealy Rosella, and Orange-flanked Parrakeets.

FINCHES: Gouldian, Ruficauda, Long-tailed Grass-, Zebra, Spice, Bib, Ribbon, Gold-, Grey and Green Singing, etc.

ETCETERAS: Dhyal Bird, Pine Grosbeaks; various Mannikins, Waxbills, and Weavers, Bay-winged Cowbirds, Lesser Sulphur-breasted Toucan and Canaries.

In cages in the conservatory were two very fine Greater Hill Mynahs, both being excellent talkers, and specimens in better health or plumage the writer has never seen.

The time passed all too quickly and most reluctantly we had to bring our visit to an end, still having a good run before us, as we purposed staying at Exmouth for the night. Of the lovely country passed through, or the wild life seen before our destination was reached, lack of space prevents any mention. After a short rest at the hotel, a walk along the sea front and dinner brought to a close a long, pleasant and interesting day.

LORD POLTIMORE'S AVIARIES: The next morning, in good time we set out for Exeter and in Lord Poltimore's absence were shown round by Mr. Hedges, the aviary attendant. Of the drive through the Park, with its huge herd of deer, the water-fowl, pea-fowl (of these there was quite a flock -the white, common species, and the pied, *i.e.*, crosses between the other two species), etc., I cannot in this notice comment upon, as the aviaries are many and their occupants legion.

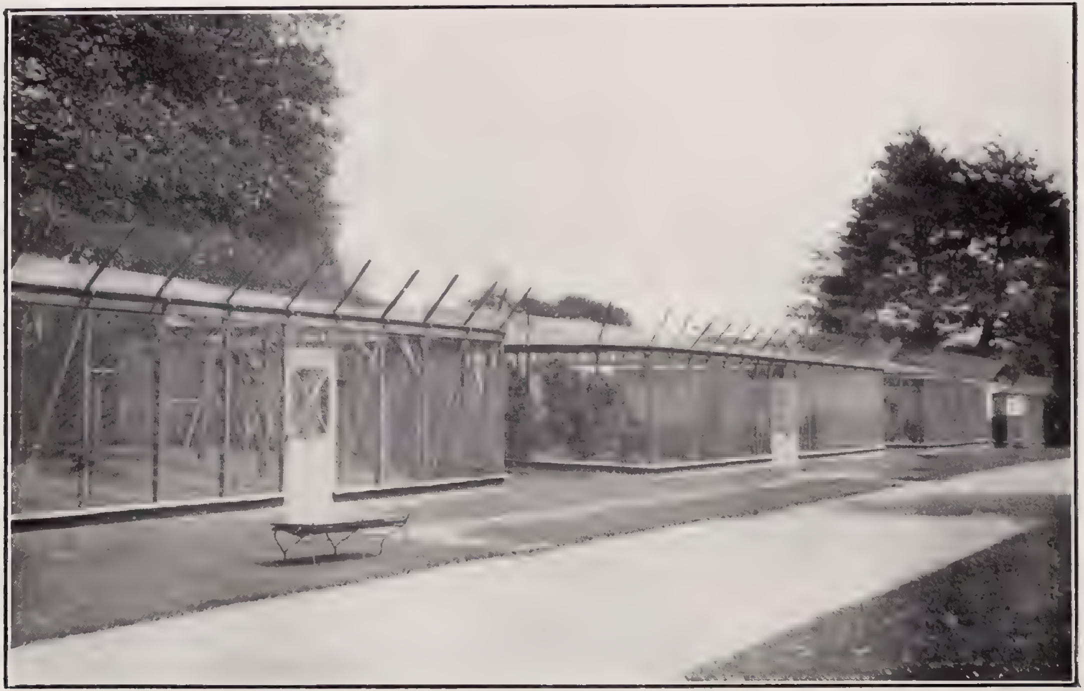
I need not say much about the aviaries, as the photo reproductions indicate these clearly they are huge, natural, and the shelters roomy, lofty and well lighted; large enough to comfortably house their occupants if extreme weather necessitated their being shut in. The shelter floors are concrete. In the plate, "A General View of the Aviaries," of course only a part can be shown as a similar series occupy the other side of the walk. This illustration gives a good general view of the aviaries, with a fair idea of their general arrangement, but, the latter feature is better shown in the next plate, "One of the Aviaries at Poltimore Park"—the projecting wire-work along front of aviaries is to keep the Pea-fowl, of which there are quite a flock (40), off the tops of aviaries. I have given a number to most of the aviaries but they have no significance, as they merely indicate the order in which we passed through the aviaries:

No. 1. Here were to be seen in pairs:

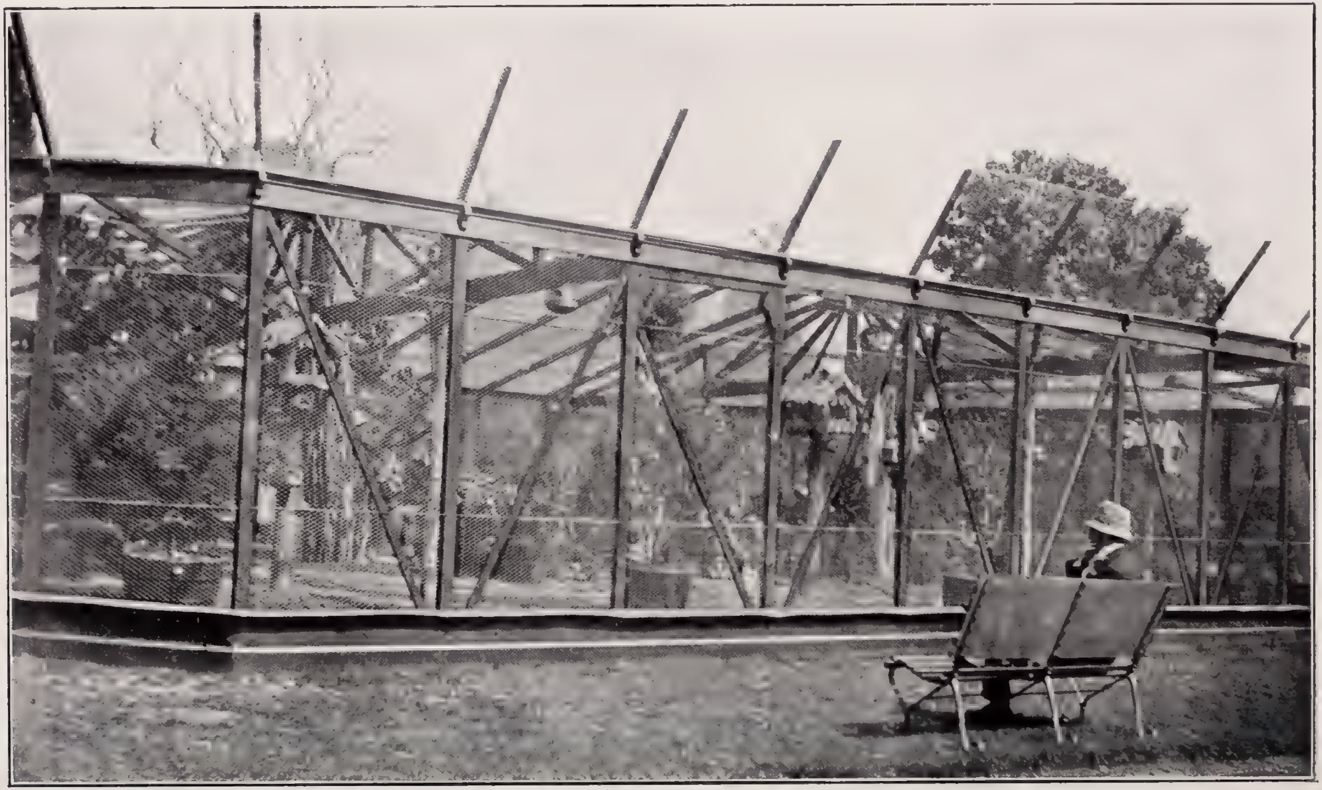
Hunting Cissa, Virginian Cardinal (*Cardinalis cardinalis*) -reared young last year and nesting again—Loo-choo Jay (*Calocitta lidthii*), Black-gorgeted Laughing-Thrush (*Garrulax pectoralis*), and Yellow Budgerigars.

The Virginian Cardinals were already incubating a clutch of eggs. The nest, an open cup-shaped one, was beautifully constructed and placed in the head of an evergreen shrub, about three feet above the ground. It contained a clutch of three eggs—white, mottled with light brown.

The Hunting Cissas as they flashed to and fro were a sight to be remembered: the heavenly blue and pale vinous brown of their plumage was most striking, especially when pausing for a moment on wire-netting or branch with tail wings outspread a display of gorgeous colouration not surpassed, though it may be rivalled, by any other feathered creature.



A General View of the Aviaries.—Poltimore Park.



One of the Aviaries at Poltimore Park.

The Loo-Choo Jay is another beautiful and also very rare species, and though perhaps, not so brilliant as the Cissa, is yet a strikingly beautiful bird—body deep rufous-brown; head, tail and flights rich purplish-blue, tail tipped with white and throat streaked with the same colour, is a fairly correct but sketchy description of them—but how greatly is their beauty intensified as they take to wing and expose the full area of their beautiful purple-blue flights; even at a fair distance is their striking colouration noticeable. They are smaller and more slender than the English Jay; but I cannot linger, as I have to note the contents of six other aviaries!

No. 2. In this enclosure the shelter was very roomy and sub-divided for special pairs; also several birds, new arrivals, etc., were in cages. Here we noted, among others the following species:

Chattering Lories (*Lorius garrulus*)—a pair and their full grown young one; Yellow-backed Lory (*Lorius flavo-palliatus*), Blue-streaked Lory (*Eos reticulata*), Purple-capped Lory (*Lorius domicella*), Euops Conures (*Conurus euops*), Red-collared (*Trichoglossus rubritorques*) and Fersten's (*T. forsteni*) Lorikeets, White-fronted Amazon, (*Chrysotis leucocephala*), and a specimen of the well known Blue-fronted Amazon, in which the head and body plumage was mottled yellow, red and green.

It will be noted that several of the above are quite rare, nearly all of them are gorgeous, and I must leave it to my readers to imagine the spectacle of a number of these gorgeously plumaged birds on the wing at once, or disposed on perches about the aviary, their brilliant plumage being literally glorified in the play of sunlight.

No. 3: Another large enclosure, one side of which was an ivy-covered wall, and planted in the flight were many evergreen shrubs. Here were gathered together some two hundred or more birds, mostly the Small Ornamental Finches, many of which were nesting—I did not make a full list but noted among many others the following species:

FINCHES: Parrot, Olive, Cuba, Bib, Fire-, Zebra, Bicheno's Ruficauda, Gouldian, Long-tailed Grass-, Masked Grass-, Spice, Sharp-tailed, Striated, Chestnut-breasted and Pectoral, Grey and Green Singing-.

MANNIKINS: Rufous-backed, Bronze-winged, Tri-colour, Bengalese, Black-headed, Yellow-rumped, etc.

WAXBILLS: Grey, St. Helena, Sydney, Avadavat, Violet-eared and Cordon Bleus.

Though so early in the year nearly all were in breeding condition, many of them having already gone to nest—a better and fitter lot of these delightful small species the writer has never seen.

No. 4. A huge enclosure, naturally planted, and with a huge shelter. It was impossible to note all its occupants, but, while we were in the aviary, quite a large number of birds were always in the picture. Of the species named below, at least a pair of each were included, in many cases several pairs were to be seen. One could easily have lingered the whole day in this single aviary and not wearied of the varied panorama of bird-life presented, but all had to be crowded into a bare two hours, so I must pass on. We noted the following species:

BUNTINGS: Indigo, Nonpareil, Yellow-bellied, Chinese (Red-backed), etc.

FINCHES: Diamond, Gouldian, Zebra, Mask Grass-, Long-tailed Grass-, Yellow-rumped, Diuca, Ruficauda, Bib, Bicheno's Mexican, Rose-, etc.

MANNIKINS: Tri-coloured, Black-headed, Bronze-winged, Magpie, Rufous-backed, White-headed; Silverbills, White Java Sparrows, and Bengalese.

ETCETERAS: Combasou, Taha Weaver, St. Helena Seed-eater, White-throated Serin, Black-headed Siskin, Nightingale, Shama, etc.

This was another beautiful crowd of feathered-life', the beauty and interest of which I must leave to my readers' imaginations, for it cannot be adequately depicted. I am convinced at least a third of the occupants passed unnoticed and are not enumerated above, for I have only listed those which passed before our vision. Nests were already very numerous.

No. 5. Another similar enclosure to the preceding one if not the aviary depicted on plate, "One of the aviaries at Poltimore Park," it is a facsimile of it, with this exception, viz.: the amount of natural cover has been increased since the photo was taken.

WEAVERS. Madagascar, Atlas, Napoleon, Grenadier, Orange, Black-headed, Comoro, Half-masked, etc.

WHYDAHS: Pin-tailed, and Paradise, White-winged and Combasou

DOVES: Senegal Turtle, Dwarf Ground, Aust. Crested, etc.

ETCETERAS: Green, Yellow and Blue Budgerigars; Rosy Pastors; Orange-headed, and White-throated Ground-Thrushes; Cuban Red-legged Thrush; Red-crested Cardinal; Malabar, and Pagoda Mynahs; Pekin

Robins; Abyssinian Yellow, and Java Sparrows; Indigo, and Nonpareil Buntings.

In such a crowd it is almost invidious to single out any—striking and beautiful or full of character practically applies to all—perhaps the most striking were the beautiful Ground-Thrushes; whether on the wing or the ground, their beauty was most pronounced and their demeanour full of interest; almost equally beautiful and certainly not less interesting, were the Rosy Pastors and Mynahs. Of course at this period most of the Weavers were out of colour, at the present time they must appear, when in repose, as gorgeous flowers set in living-green.

No. 6. In this enclosure the occupants were not so numerous, but there was not an uninteresting species among them, and with space in which to disport themselves, their beauty is easier realised than described.

Western Yellow-winged Laughing-Thrush (nesting), Cuban Red-legged Thrush, Crested Mynahs, Pine Grosbeaks, and Yellow-billed Blue-Pies.

No. 7. A huge enclosure, similar to those already described, but with dead trees instead of living bushes, there was, however, a fair amount of grass and coarse herbage growing in the flight. The gorgeous, almost garish, colouration of the birds, however, fully made up for the lack of any horticultural display. Flying all together we noted the following species:

CONURES: Golden-crowned, Yellow, Nenday, Blue-crowned, Patagonian, Jendaya, Cactus, and Red-bellied.

PARRAKEETS: Pennant's, Adelaides, Red Rosella, Mealy Rosella, Blue-bonnet, Many-coloured, Red-rumped, Banded, Ring-neck, Alexandrine, All Green, Lineolated, and Tovi.

Cockateels, and Black-cheeked Lovebirds.

Some of the above were incubating clutches of eggs, but it is the sight of them on the wing that beggars description. Where all are so beautiful and brilliant, the mass of colour is almost bewildering. Those of my readers who are acquainted with the species will be able to appreciate my difficulty—truly the sight of Pennant's Parrakeets and Yellow or Sun Conures on the wing together alone is a "sight for the gods," and with that remark I must leave them.

In yet another aviary were some nice and interesting species, several of which were already engaged in the duties of incubation, but I took only a few disjointed notes on the spot, which include the following species:

Mexican Rosefinches, Virginian Cardinals, Bicheno, and Gouldian Finches various Grassfinches, Black-cheeked and Madagascar Lovebirds, Cuban Finches, Zebra Doves, Plumed Ground Doves, etc.

The Water-fowl time did not permit us to view, but our plate "The Haunt of the Water-fowl," illustrates what charming and suitable quarters they enjoy. The series is a very large one and I hope for the opportunity of seeing them on some future occasion. In our plate are seen some Flamingoes in the centre, also few Ducks, but the latter are very small.

The writer ventures to hope that Lord Poltimore will send in some notes of the season's results for insertion in our Journal.

I am fully conscious that this description is utterly inadequate. but with barely two hours in such a series, what could one do! Two days would have been insufficient to write up and briefly describe such a magnificent array of feathered life.

(*To be continued*).

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A Journey Across the Sierras, S. California.

By Wm. Shore Baily.

The sun was rising over the snow-capped Sierras as my partner and I left our winter quarters on Buena Vista Lake, for our annual summer visit to the coast. Away to the east, Mount Whitney, the highest mountain in the states, was plainly visible, at this distance looking no higher than many of its neighbours. To the west the less lofty but still high mountains of the coast range were lit up by the morning sun. To the south, the direction in which we were heading, a spur from the Sierras runs into the Coast Range, and across this, by way of the Tejon Pass our route lay. As usual we were travelling light, our tents and heavier camp outfit having been sent on by rail. All we took with us were our guns, blankets, cooking pots, and two or three days' supply of grub, thus making the load as light as possible for our one horse waggon.

The Haunt of the Water-fowl.—Poltimore Park.

In the clear morning light, the entrance to the pass looked not more than three or four hours' journey distant, but we knew by experience that it would take at least ten hours.

Our way for the first few miles led along the edge of the lake. Away on the open water, White Pelicans (*Pelicanus erythorhynchus*) now returned from the Mexican lagoons, were going about in pairs, very evidently intent on the business of nesting. On the edges of the tules young Redheads (*Mareca americana*) and Coots (*Fulica americana*) were swimming, while further in, the quack of the female Mallard tells us that young flappers are also on the feed. A mile or two after leaving the lake, we struck a patch of very heavy sand. Here our waggon sank in to the axle, and even with both our shoulders to the wheels, we were unable to make more than a mile an hour. Luckily after a couple of miles we struck hard ground again. Whilst we were resting in this sand patch, I noticed a little colony of Desert Chipmunks. They were the same size as the common Striped Chipmunk, but were the colour of the sand. Although they couldn't have seen human beings more than half-a-dozen times in the year, if as often, yet they were very shy, and disappeared down their holes on my approaching too near them. I have not seen them elsewhere in California. This part of the prairie was most uninteresting, and bird life except for a few Turkey Buzzards (*Rhinogryphus aura*) was altogether absent A dwarfed and stunted Sage Bush was the only vegetation. Here we saw one of the most realistic mirages I have met with in California. Some 200 to 300 yards in front of us, there appeared a beautiful lake, with fine willows and cottonwoods growing along one bank. A slight breeze rippled the blue water, and little waves could be seen breaking on the shingle. As we approached nearer, we could see the leaves of the trees quivering as they do in a light breeze. It only wanted a few waterfowl swimming on the water to complete the illusion. When apparently only 100 yards distant, it suddenly vanished, leaving a broad tract of sandy desert in its place. It made us both feel frightfully thirsty, and one can well imagine the despair of any poor devil who met with this experience when his water canteen was empty. Mirages on the Lake were of frequent occurrence, generally in the early morning, and usually more or less distorted. Occasionally in the evening, a mirage, in the shape of a town with towers, church spires, etc., would appear on the northern horizon, but never very distinct, or well defined. After two hours' travelling through this kind of country, we at last reached an artesian well, where we halted for lunch, and to rest our tired cayuse. Where the water overflowed from the well, a jungly mass of tules and brambles had sprung up, the only patch of real green within miles, and in this quite a lot of birds were nesting. I found nests of the Red-winged Blackbird, two varieties (*Agelaeus phoeniceus*) and (*A. tricolor*), the Grey Shrike (*Lanius ludovicianus gambeli*) and the King Bird (*Tyrannus vociferans*). The latter bird gave us an exhibition of its courage, whilst we were having our lunch. A Blue Harrier (*Circus hudsonius*) having inadvertently approached their nest, was set upon by both birds, who made the feathers fly from its head and neck and chased it for over a mile. These Flycatchers do a good deal of harm to the apiarists, and I have been more than once implored to shoot them by an enraged beekeeper. After lunch our way lay through very much the same type of country we had traversed in the morning, and we saw more reptiles than birds. Here our retriever had a very narrow escape from a rattlesnake, and, but that he was startled by the rattle, giving me time to slip a shell into the gun, he would have been done for. As it was, he sprang at it just as I pulled the trigger. The shot was a snap one, as our horse—as most horses are—was frightened by the rattle, and my partner had some trouble to keep it from bolting. However, the shot blew the snake's head off luckily, thus saving the dog from certain death. It was a big snake, having ten rattles. The Mexicans take these snakes alive, first inducing them to strike a silk handkerchief, when by a sudden movement, they jerk out their fangs, thus rendering them harmless. They find a ready sale for these reptiles. I once, when skinning a Grebe (*Aechmorhynchus occidentalis*), found a pair of fangs $\frac{3}{4}$-inch long embedded in the fat. They must have come from a very large snake, thus proving that they occasionally lose their weapons when striking birds or animals too big for them. In irrigated districts or around ranches where hogs are kept, rattle-snakes are now scarce, as hogs devour them eagerly and are apparently immune from their bites. Before we had left it many yards, a Buzzard swooped down upon it. I think that these birds kill a good many snakes on their own account, as I have frequently seen them hunting country containing nothing but snakes and Jack Rabbits. We now passed the first house we had seen on the journey. It had evidently been deserted for a number of years, as it was buried with sand up to the bedroom windows. The corral also was buried, with here and there a larger post than ordinary showing above the sand. Some Eastern farmer, or European settler, probably quite unacquainted with Western sandstorms had sunk his capital in what must have been a hopeless struggle from the first. Here we saw the one and only live Antelope I have met with in California. It passed across the track about 200 yards in front of us. There are still a good many of them left in the state, but they keep away from civilization. I have sometimes seen them on sale in the butchers' shops in 'Frisco and Los Angeles.

We now began to ascend gradually. A mile or two in front of us was what is known as the flower prairie. It looked exactly like a brilliantly coloured carpet. It was a very beautiful sight, and a great relief to the eyes after the glare from the sand that we had been passing through. I am no botanist, and couldn't name any of the flowers seen, but they were in great patches of every conceivable colour, and as we drove through them I noticed that some of them were very similar to our English wild flowers. Here we again met with bird life. The Horned Lark (*Otocorys alpestris rubra*) and the Sparrow Lark (*C. grammacus strigatus*) were amongst the birds seen. These tame, but attractive little birds are found all through the great central valleys, and, I have many times found their nests on the ground in the vineyards. The Horned Lark is very like our Shore Lark (*Otocorys alpestris*). The big Yellow-breasted Lark (*S. magna neglecta*) was also nesting amongst the flowers. A very handsome bird but a poor songster. Right in front of us was a clump of trees, the first we had seen since leaving Buena Vista. On one of the highest of these a large bird was sitting. This suffered us to approach quite closely and proved to be a Golden Eagle (*Aquila chrysaetos*), a considerably larger bird than the European variety. It looked very handsome when on the wing, its slow and steady wing beats giving one the idea of great power. We found that the trees were surrounding a circular well about 20 feet in diameter, and of the same depth. Other birds noticed were some Ground Doves (*Chamaepelia passerina*) and a large Chicken Hawk (*Buteo borealis calurus*). Both these birds are found everywhere on the prairies. After watering the horse we set out again, the mouth of the pass being now plainly visible.

(*To be continued*).

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The Rearing of Bulbul Hybrids.

By Miss Alfreda B. Smyth.

At the Editor's request I am writing an account of the rearing of Bulbul hybrids in my aviary.

The male parent was a Red-vented Bulbul (*Pycnonotus haemorrhous*) and the female a Red-eared Bulbul (*Otocompsa jocosa*). The cock bird came to me, ex Gamage, in the autumn of 1912; the hen has been with me since 1911, and previous to that she had had two years of out-door aviary-life.

In 1913 they occupied a cage with many other birds, but in spite of this disadvantage they nested, and laid two clutches of fertile eggs, which unfortunately, in each case, got broken before the period of incubation was complete—the hen sat very tight, not even leaving the nest while the cage was cleared. The eggs got broken owing to the Bulbuls' combativness with the other occupants of the cage.

This spring (1914) I put them out among many kinds of birds in my out-door aviary. The hen wanted to nest in March, but the interference of the Japanese Hawfinches prevented this, and the eggs were dropped and broken, as at that period the Hawfinches were nesting and very fierce. The Hawfinches hatched out one young bird, but it only lived three days.

Early in June the Bulbuls started to nest again, but the episode recorded above was repeated and in the encounters the hen Bulbul got hurt and was brought indoors for a night, and the next day was placed in a small enclosure built off the side of the aviary, and her mate allowed to go in to her.

She dropped and broke two eggs, so I thought it a pity to keep them there, and put both birds into another aviary which contained: Red-rumped Parrakeets, Black-cheeked Lovebirds, and a pair of Virginian Cardinals; here they settled down and were soon quite at home.

In late June they set about nesting again, their choice falling on a wire pot basket into which I had put some moss. On the top of this she made a nest of hair, grass, and one or two leaves, all the materials she had—the cup was very shallow. On July 3rd she laid an egg, and others on each of the two following days—her clutch has always been three—she had already laid two clutches this year, and I was agreeably surprised that she had produced a third.

The eggs are pinkish-white, splashed, and lined with purple and reddish-brown.

She sat very lightly for the first two days, coming off whenever anyone went near the aviary, but sat very steadily once the clutch was complete. I did not see the cock take any part in nest construction or incubation. Early in the morning of August 6th I found three chicks in the nest, but came away very quickly as they were evidently only just hatched, and I did not wish to disturb the hen. All seemed to go well, both parents fed the young, and after the first week they feathered fast. On August 20th one left the nest and would not return to it—all looked too small to come out, but there did not seem room in the nest for all three—however, I returned it to the nest and then the other two came out and none of them ever returned to it. There was much noise and excitement, the parents following their young about and seeming quite distressed, and I was feeling the same as I feared the young would either get drowned or the Parrakeets and Lovebirds break their legs or kill them, so as it appeared to me as the least of two evils I caged parents and young in a 20 inch box cage and left it in the aviary, with much fear and trembling, I confess, as I expected the parents to cease feeding under such disturbance and altered conditions. However, I am glad to say the parents remained most devoted to their young ones.

To-day, August 24th, I have completed another small aviary, only 7 × 2½ × 4½ feet high. I have transferred the

Bulbuls into this and I was surprised to find they had got on so well, being able to fly quite strongly, easily reaching the top perches, upon which the three young and their proud parents have settled for the night.

The young are very quaint little creatures, and chatter a lot, particularly the largest of the trio; two of them have at present rather larger crests than the other one. When a week old all three had a bald spot on the head, now all are well feathered, with crests resembling that of their male parent, which they raise when chattering. So far they have the brownish colour of the hen on the back; their crests are blackish; chests dark grey-black in the same form as the black chest of the male parent; remainder of underparts almost white, but showing a tinge of yellowish pink on the ventral region. At present the cheeks are not feathered, but I will keep them under close observation and send later further plumage details.

They have been reared mostly on insects, but the parents have had access to orange and insectile mixture (live food is likely to be an anxiety in the near future, as mealworms are practically unobtainable. I supplied such earwigs, spiders, etc., as the garden produced, and of these the Bulbuls were very fond and came to the wires for them; suet-fat was also eaten; I also gave live ants some days and when the winged ants were out in swarms I gathered them up and the Bulbuls made short work of them. The little Bulbuls all look fat and jolly so I do not grudge any trouble incurred in their upbringing.

Previous to the young leaving the nest, when I entered the aviary the hen came off for mealworms and I had a look at her brood, which she did not seem to mind. She did not brood then much during the day, but always covered them at night—none of the other birds interfered with the nest, probably too busy with their own, as the Red-rumps and both pairs of Black-cheeked Lovebirds were nesting.

[We think this is the first time this cross has been reared in Great Britain.—Ed.].

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Nest of *Sitagra luteola.*

Nest of *Hyphantornis abyssinicus.*

Photos by W. Shore Baily.

Nesting of Dwarf and Abyssinian Weavers.

By Wm. Shore Baily.

Dwarf Weaver (*Sitagra luteola*). This species is a most attractive little bird, and about equals our English Siskin in size.

Description. Male: General body colour chrome-yellow; wings greenish-yellow; face, forehead, centre of crown, and upper throat deep black.

Female: Dull greenish-yellow.

Dr. Hopkinson, in "B.N." Vol. VIII, pages 39—40 writes of this species as follows:

"Smaller than the other Yellow Weavers; the black of the "face in the adult cock only covers the front half of the crown, the "sides of the face and the upper throat. Bill rather more slender "than that of *Hyphantornis*."

"I am almost sure that it is this species which breeds in such "numbers all up the banks of the river during the rains. The nests "are made of coarse grass suspended in groups in the bushes (generally "thorns) over the water and only accessible by boat."

"In shape they are like a stumpy retort with a woven perch "between the turned down entrance and the egg-chamber; the latter "is lined with a little fine grass and a few feathers.

"The eggs are white, rather long, and oval in shape.

"When building operations are in progress the banks of the "river are alive with these birds, all chattering at once, as they fly "in and out with grass stems, and vie with each other in the actual "work of weaving the nests.

"They are in colour from July to December, a few showing "signs of colour till about February. When out of colour during "the dry season they go about in large flocks in the koos-fields, but "I think a great many leave the country then, returning to the river "to breed at the proper season."

I have two pairs of this charming and amiable species in one of my aviaries, and most interesting and attractive they are. When insect food is plentiful they subsist almost entirely on what they can catch, but when they are feeding young, mealworms are supplied. In the winter they have to live almost entirely upon the usual seed mixture.

Towards the end of June I noticed one pair were constructing a nest; this was suspended over the pond, and was woven from grass growing around the edges of the water—thus this species in my aviary acted exactly as Dr. Hopkinson tells us they do on the Gambian river banks.

Two eggs were laid and incubation commenced on July 2nd. The opening into the nest was so small that I found it impossible to get two fingers in to extract an egg for examination. On July 14th I found there were young in the nest. Both birds now became extremely tame, and would follow me round the aviary for mealworms. I could not see that the hen, who alone fed them for the first ten days, broke up the mealworms, but this she may have done in the nest itself. The young flew on the last day of the month, and the male parent now began to take his share in the upbringing of his progeny. It is possible that he might have been doing so earlier, but although I frequently saw him with a mealworm in his beak, in the vicinity of the nest, *I never once saw him enter or leave it.*

On the 12th of August I noticed both parents driving their young ones, so I examined the nest and found the hen had again laid two eggs; these I extracted by cutting open the back of the nest. The eggs were large for the size of the bird and pure white.

The nestling plumage was grey, with the exception of the breast, which was white; but for their shorter and thicker beaks they could easily have been mistaken for Willow Wrens.

In the aviary with these birds are Waxbills and similar small fry, and the Weavers have proved quite inoffensive and may safely be trusted in such company.

At the time of writing (August 21st) they have again gone to nest, and are incubating a clutch of two eggs in a nest suspended from the roof of the aviary. [We do not think this species has been previously reared in captivity.—Ed.].

ABYSSINIAN WEAVER (*Hyphantornis abyssinicus*). In an adjoining aviary are two cocks and one hen of this species, also odd cocks of Rufous-necked (*H. cucullatus*) and Black-headed (*H. melanocephalus*). The Abyssinian and Rufous-necked had built many nests, but I had not noticed the hen take any interest in any of them. To my surprise one morning early in July, I saw egg-shells beneath one of the Abyssinian's nest, and on examination found it contained a young bird, two or three days old, and two eggs, the latter I extracted with much difficulty—they were oval in shape, white in colour, and very finely speckled with pink spots.

Unfortunately the young bird was not fully reared, being drowned during a heavy thunderstorm when thirteen days old. Both parents fed it from the beginning, the cock especially taking in large pieces of bread and milk, as well as all the mealworms he could induce me to supply him with

This species is a very strikingly coloured, black and yellow bird, much resembling some of the South American Troupials. Major Dickinson, the author of some very interesting sporting books on Uganda and Central Africa, tells me that it is found all through the Soudan, and also in the neighbourhood of the Great Lakes. It nests usually in the vicinity of water.

It is very noisy and excitable, and when nesting will drive away such large birds as Doves and Quails from the vicinity of its nest. Two or three of these birds, hanging head downwards from their nests, all singing together and waving their wings, make a very interesting picture, never failing to attract the attention of visitors. I have several times tried to get a photo, but so far without success.

At the time of writing (August 21st), the hen is again inspecting one of the nests, so it is just possible that I may yet succeed in breeding them this season.

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Birds of the Jhelum District and an Ornithological Diary from the Punjab.

By H. Whistler, I.P., M.B.O.U.

June 1.—Several Cattle Egrets (*Bubulcus coromandus*) seen feeding in some irrigated fields in company with a White Ibis (*Ibis melanocephala*) and a single Little Egret (*Herodias garzetta*)—the last named being the first of the species that I have identified here. On some dry fields near by I noted 4 White-necked Storks (*Dissura episcopus*) and several Black Ibis (*Inocotis papillosus*). In the latter place were 2 pairs of Indian Conures (*Cursorius coromandelicus*) which I fancy intend to breed there.

A single Marsh Harrier (*Circus aeruginosus*) seen.

June 2.—Left by train for Hansi—the cantonment of former days, so often mentioned in Hume's "Nests and Eggs of Indian birds," in connection with notes supplied by Mr. Blewitt.

June 3.—At Hansi, numbers of Pond Herons (*Ardeola grayi*) are busy building at the tops of the high Mango-trees in the rest-house compound.

Seeing a Roller (*Coracias indica*) leave a hole about ten feet from the ground in the brickwork of an old ruined mosque, I looked in to find that the hole contained 2 eggs and 2 newly hatched young; there was no nest and the hole was about two feet long and horizontal in direction.

Pied Mynahs (*Sturnopastor contra*), Taylor-birds, and Grass-warblers (*Cisticola cursitans*) are more common here than in Hissar.

June 4.—At Hansi. Four eggs taken from a nest of *Sturnopastor contra* which was a large shapeless mass of coarse grasses, rags, feathers, and strips of maize leaves, placed near the summit of a large Kikur tree. The birds were present but the eggs were all addled. This may have been due to the great heat or in some way connected with a terrific storm which took place last month, as I found bad eggs in one or two other occupied nests about this time.

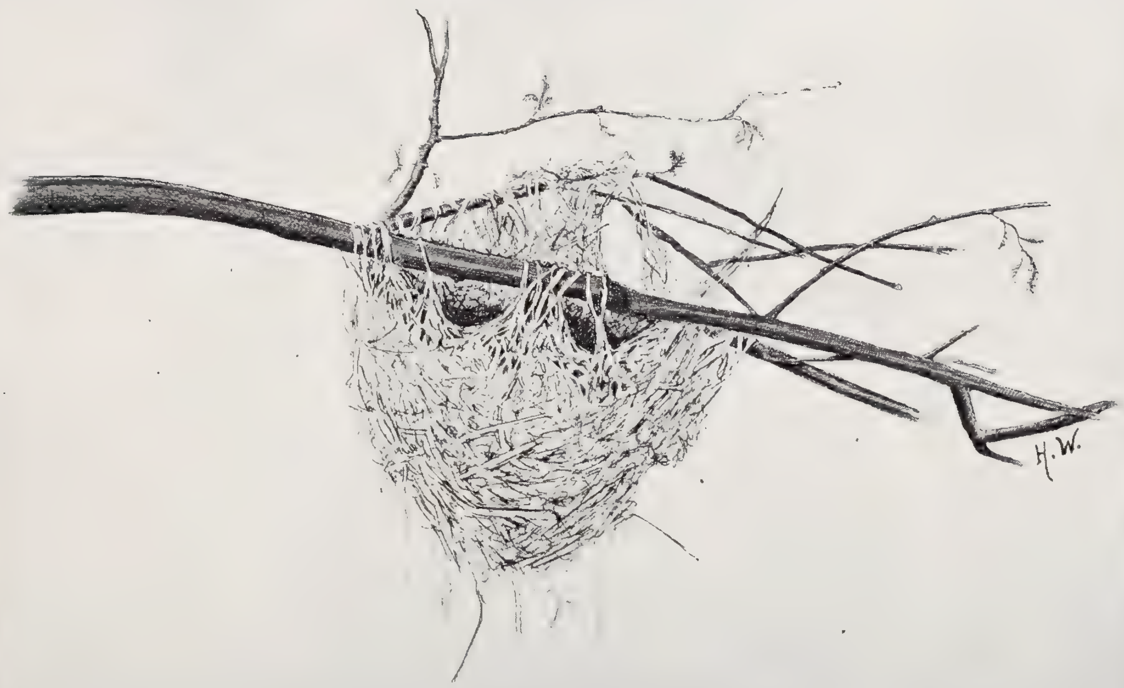
In a flooded maize field I saw a large Reed Warbler, possibly *Acrocephalus stentoreus*.

A Brown Fish Owl (*Ketupa zeylonensis*) was haunting the rest-house garden, perching in the huge Peepul trees.

A Crested Honey Buzzard (*Pernis cristatus*) seen.

June 5.—At Hansi, some nests of *Sturnopastor contra* found in thorn trees, by the canal; the majority were unfinished, but from one I took five fresh eggs. All the nests were of the same type—shapeless masses of rags, feathers, grass, etc.

In a Shisham tree standing in the middle of a field, noticed a large nest—a rough structure of sticks. On this a bird was sitting, which when flushed proved to be some species of Eagle. I had only my .410 collecting gun with me and so failed to secure the bird either as she left the nest, or when she settled on the top of a large tree some distance away. However, I sent a man up the tree to examine the nest and as he was climbing a dark Eagle, similar to the bird that I had flushed, flew close by and settled in a neighbouring tree. Being satisfied that this was one of the parent birds I walked up and managed to secure it as it took flight. The climber reported a single egg, which I told him to take. This egg, which contained a living chick, measures 64.5 × 57.5 mm. In colour it is dull white with a very faint gloss, spotted, blotched, and faintly streaked with reddish brown, the markings being mostly gathered together to form a zone near the broad end. The egg is somewhat stained. The bird secured was the male; in its gullet was an entire squirrel, the head being in the gizzard and the tip of the tail in the throat.



Nest of Indian Golden Oriole (*Oriolus oriolus kundoo*).

These smaller Eagles are difficult to identify, but the bird obtained appears to be the smaller Indian Spotted Eagle, *Aquila hastata* (Less).

A single Pied Bush Chat (*Pratincola caprata*) noted —this species is very scarce at present for some reason.

Pernis cristatus,, *Ketupa zeylonensis*, and a pair of *Astur badius* noted.

June 6.—c/3 eggs of the Large Pied Wagtail (*Motacilla maderaspatensis* found in a nest building in a blocked watershoot on the roof of the Hansi rest-house. This is the only species of Wagtail which breeds in the plains and in this part of the Punjab the species is not uncommon, although I found it sufficiently scarce in Jhelum and Rawal Pindi districts.

Returned to Hissar where I saw the first Pied Crested Cuckoo (*Coccystes jacobinus*) of the season.

June 7.—I saw a common Woodshrike (*Tephrodornis pondicerianus*) attacking a Squirrel most viciously at the end of a bough of a Shisham tree. The bird's nest, of course, proved to be near by but when examined it was empty, and the nest vanished soon afterwards. These birds make beautiful little cup nests, placed in the forks of branches, but they can only bring off a brood in the most favourable circumstances as the nests get blown down in dust storms. Since arriving here I have found 4 nests, and all have been destroyed before I was able to secure any eggs. The great numbers of Squirrels here must destroy many eggs of all kinds.

Three incubated eggs of the Common Roller (*Coracias indica*) found in a hole in a Kikur tree. There was no nest. A male Small Minivet (*Pericrocotus peregrinus*) noted.

Left by the night train for Sirsa.

June 8.—At Sirsa. Two partly built nests, of the Indian Wren-Warbler (*Prinia inornata*) found, one in a bush, and one attached to some spear grass. The Weavers (*Ploceus baya*) are also beginning to build their curious retort shaped nests.

A nest of the Common Babbler (*Argya caudata*) with 4 eggs found in a low thorn bush.

2 Sarus Cranes (*Grus antigone*), a Black-winged Kite (*Elanus caeruleus*) and some Ravens noted.

Crested Larks (*Galerita cristata*) are not uncommon here. I have not yet seen them in Hissar itself.

June 9.—At Sirsa. The Brown Rock Chat (*Cercomela fusca*) noted in the city. Some Night Herons seen in the evening.

June 11.—Took 2 hard set eggs from a nest of the Indian Golden Oriole (*Oriolus oriolus kundoo*) placed at the end of a bough at the top of a Kikur tree. The nest is represented in the accompanying illustration. In the same tree a King Crow (*Dicrurus ater*) had a nest with 2 incubated eggs. Three eggs in a nest of the Indian Roller in a hole in a tree trunk about 10 feet from the ground.

Three slightly incubated eggs in a nest of the Indian Robin (*Thamnobia cambaiensis*) in one of the holes for the bars of a loose box in my stable. The nest was built of grass lined with horsehair. Three eggs in a nest of the Purple Honeysucker (*Arachnecthra asiatica*) suspended in a Kikur tree about 15 feet above a pond.

Two Striated Swallows (*Hirundo erythropygia*) seen.

June 12.—Several White Ibis (*Ibis melanocephalus*) seen flying over my bungalow in the morning. A Pied Mynah (*Sturnopastor contra*) seen. Cut out a nest of the Black-headed Mynah (*Temenuchus pagodarum*) built in a hole about a foot in depth in the trunk of an old Kikur tree; the nest was built of grass and feathers.

June 13.—Many eggs of the Bank Mynah (*Acridotheres ginginianus*) obtained from a large colony in a mound, which is apparently the refuse heap of an old brick kiln. The nests of course were all at the end of long tunnels worked out by the birds themselves.

Coccystes jacobinus, Pericrocotus peregrinus and *Æsalon chicquera* seen.

June 14.—A pair of Wandering Tree-Pies (*Dendrocitta rufa*) have a nest in my compound. I was hoping to obtain nestlings from it to rear, but the eggs were blown out in a dust storm.

Drove round the Cattle Farm, where there were many water birds—the majority feeding in the irrigated fields—they included the following species: White-necked Storks, Little Egrets, Cattle Egrets, Pond Herons, Black Ibis, and 2 Sarus Cranes. I also noted 3 Spoonbills which were the first I have seen here.

Several Eagles were noted, including a very white bird, which was perhaps an example of Bonelli's Eagle (*Hieraetus fasciatus*). An unusual straggler at this time of year was a female Kestrel.

A Rufous-backed Shrike and a Pied Mynah noted.

June 15.—The Blue-cheeked Bee-eaters (*Merops persicus*) which were common last month have for the most part gone. I cannot make out whether they were merely here then on migration, or whether there is some other explanation; at any rate there are still some to be met with here and there in small numbers only.

Found a nest of the White-eared Bulbul (*Molpastes leucotis*) placed about 6 feet from the ground in a fork of "wand" or "Tal" bush (*Salvadora oleoides*), it was a slight and fairly neat cup rather smaller than a couple of nests of *Molpastes haemorrhous* which I had the opportunity of comparing with it. The inner measurement of the cup was 2½ inches in diameter, by 1½ inches in depth. It was composed of bits of grass, bents, roots etc., with a lining of fine roots; a few cobwebs and the dried blossoms of some bush were affixed to the exterior of the nest. There were 4 hard set eggs of the reddish speckled type common to all the Bulbuls of this genus.

Two nests of the Common Babbler (*Argya caudata*) found with 2 and 3 eggs respectively; also a single egg in a nest of the Purple Honeysucker (*Arachnecthra asiatica*) —an unusually late date, as far as my experience of the species goes.

The flocks of the White-throated Munia (*Munia malabarica*)—the "Silverbill" of dealers at home—which have been so numerous since I have been here, appear to be breaking up; this doubtless heralds the approach of the breeding season. Several Black Ibis, two pairs of Indian Coursers (*Cursorius coromandelicus*) and a Pied Mynah seen.

June 16.—About a large patch of freshly irrigated land on the cattle farm I came upon the largest number of Falcons I have ever seen together. There were seven or eight immature birds and three fine adults of the Lugger Falcon (*Falco jugger*) either sitting about on the ground or flying rapidly in various directions, evidently on the hunt. There were so many and they kept on changing their positions so rapidly that I was unable to count the exact numbers, more especially as there were also many Kites (*Milvus govinda*), Egyptian Vultures, White-backed Vultures (*Pseudogyps bengalensis*), a pair of Red-headed Merlins (*Æsalon chicquera*) and an Eagle or two, which had also been attracted by the water. The whole formed a wonderful picture of raptorial life which I should imagine could be equalled in but few other countries.

I left by that night's train for a short holiday in the Hills, arriving back at Hissar, on 29th June. As the notes made in the Hills refer mostly to very different species to those seen at Hissar, I do not include them here.

June 29.—Three fresh to slightly incubated eggs taken from a nest of the Madras Red-vented Bulbul (*Molpastes haemorrhous*) built some 10 feet from the ground in a thorn tree by the wayside. The nest was a somewhat irregular cup, due to the fact that it was wedged into a crevice between several twigs; hence the inner diameter varied from 2½ to 3 inches. The foundation of the nest was built of fine twigs mixed with dry leaves, and the cup was thickly lined with very fine grasses and roots.

Pied Crested Cuckoos (*Coccystes jacobinus*) have become common during my absence in the hills. A Pied Mynah seen.

June 30.—While we were driving a crop of standing "Jowar" (this produces the seed known to aviculturists as "dari") for pig, I had a good opportunity of noting the hordes of small birds collected in it. The numbers of Weavers (*Ploceus baya*) and White-throated Munias (*Munia malabarica*) were doubtless attracted by the half-ripe seeds: while the luxuriant green leaves and stems harboured sufficient insect life to collect numerous Wren-warblers (*Prinia inornata* and *socialis*) and Yellow-eyed Babblers (*Pyctorhis sinensis*).

Near my stand a fine cock Black Partridge (*Francolinus vulgaris*) was standing on an old stump, giving vent at intervals to his curious creaking call "Subhan teri kudrat" (omnipotent, thy power) as it has been rendered. A little further off two pairs of Sarus Cranes (*Grus antigone*) were feeding, and overhead 4 White Ibis and a Cormorant passed; so until the pig would "break" I had plenty to occupy my attention.

Corrigenda. Page 167, line 8, for "bare-headed," read bar-headed.
Page 168, line 25, for "72 and 74," read c/2 and c/4.

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Correspondence.

HEAT FOR AILING BIRDS.

Sir,—The following extract from a little Parrot Manual of some fifty years ago, will perhaps be of interest in connection with Dr. Lovell-Keays' recent most interesting article on the Heat Treatment.

"It has often been found, when all other means have failed "to restore a bird to health, placing it in an immoderate degree of heat, "has been resorted to, and attended with signal success. Among the "instances of this kind, the following fact may be relied on.

"A valuable African Grey Parrot having taken a severe cold, "was attacked with violent diarrhoea, followed with inflammation; so "powerful was the attack, that the bird's life was despaired of, and the "usual restoratives applied, and most powerful specifics employed, but "all without producing the desired results. In the short space of about "three days, the bird was reduced to a mere skeleton, was unable to "partake of any kind of nourishment or medicine, and ultimately "through excessive weakness and exhaustion, fell to the bottom of the "cage, which being followed by two or three attacks of convulsions, it "was considered the bird's life was extinct. The fire in the apartment "having been just removed from the stove, and the hot cinders placed "among the ashes beneath, the bird was laid on a thin piece of flannel, "and placed upon them. Not many minutes had elapsed before it began "to move, and, to the extreme surprise of all present, stood upon its "feet. The fire was re-kindled, the bird placed upon a piece of soft "cloth, on the hob, not more than eight or nine inches from the fire, and "after having remained there about an hour, it was again placed in "its cage being able to mount its perch. In the morning it was evidently "greatly recovered, and by careful attendance, and providing it with "such specifics as are necessary (see page 37), the bird's health was "perfectly restored, and within four days after, was heard to give utter-"ance of the same words and sentences it had for a lengthened period "been accustomed to use."

The work from which the above is taken is "The Parrot-keeper's Guide," by an experienced dealer. Published by Dean and Son. There is no date, but the advertisement pages are dated '61, and it is a slim little cloth-bound volume of 48 pages and some half dozen irregularly coloured illustrations.

The quotation is verbatim and the grammar (which in places seems to me somewhat involved) is the writer's, as are also those expressions, such as "partake of" and the extreme detail as to distance, which would suggest his close relationship to the police witness, who invariably "proceeds" when he "goes" and "observes" when he sees.

It would have been interesting to have learnt the kind and locality of the "inflammation," which the writer omits either by accident or from motives of delicacy or perhaps (may one hint), ignorance, but apart altogether from this, the point I personally wish he had made clear is: Was the "thin piece of flannel" burnt up? and was that the reason why "a piece of soft cloth" was needed for the second application of the treatment. E. HOPKINSON.

NESTING OF RED-COLLARED LORIKEETS

(*Trichoglossus rubritorques*).

Sir,—My old pair of Red-collared Lorikeets have nested but with only partial success. They were in a large cage 3ft × 3ft., and kept in a room where there is constant coming and going. I gave them a nest-box to sleep in, and on July 8th the hen commenced to sit.

I do not know how many eggs she had, but on August 1st I thought I heard young birds in the nest; the sound grew louder each day until August 21st; the next day I heard nothing and the parent birds were out of the nest most of the day. Still I hoped all was well and that now the young ones were three weeks old, perhaps they did not need constant brooding. However, on the 25th and 26th inst. they turned out of the nest two lumps, all that remained of their young—it is most annoying and disappointing, but I am afraid the parents must have eaten them.

I fed on sop, made of Horlick's Malted Milk, Mellin's Food, and honey poured over tea biscuits. I also supplied dry sponge cake, fruit and canary seed; of the latter they took freely.

I am at a loss to understand the cause of the failure..

(Miss) E. G. R. PEDDIE WADDELL.

Stamannan, 26/8/'14.

[Writing from memory, we think, only a single young bird of this species has been fully reared in captivity, and, strangely enough, this bird was reared in a cage of about the same size as Miss Peddie-Waddell's in the Parrot House at the London Zoo; thus the conditions were the same. The dietary was milksop and fruit—this young bird still lives and is perfect, save that the mantle is rather thinly feathered. There have been many attempts in aviaries and bird-rooms by many pairs of birds and in some instances under the most favourable conditions, but all have fallen short of actual success. It is difficult to assign any definite reason for the failure, though one may remark that captive birds often fail with their first nest, but achieve full success later, and we hope this will be the case with Miss Peddie-Waddell's pair.—Ed.].

REARING BLACK-CHEEKED LOVEBIRDS BY HAND.

Sir.—It may be of interest if I state that I have succeeded in hand-rearing the two young Black-cheeks, which were forsaken by their parents. They are now quite tame and very fine birds.

They had no feathers at all when forsaken and looked awful. I fed them from the first out of a tea-spoon, just pouring the food down their throats. The first food was very sloppy and consisted mostly of Osborne biscuits, mixed with crushed wheat—varied with soaked "Uveco" and crushed wheat—later still anything came in nice and was enjoyed, cake or eggs so long as it was sloppy—they soon learned to feed themselves from the dish.

The most difficult part was keeping the right temperature, they were generally either too hot or too cold—I kept them in a basket on the bath-room cylinder, and fed them late and early, commencing in the morning about 6 o'clock. They were a terrible lot of trouble at first, but have repaid one; their chief pleasure now is sitting on and nibbling at one's fingers.

It may also be of interest to state that I have a young Green Budgerigar, *quite blue underneath*, I hope it will remain so after the moult. (Mrs.) ELEANOR CARTWRIGHT.

Wakefield, August 22, 1914.

AVIARY NOTES—1914.

Sir,—If the following notes are of sufficient interest please publish.

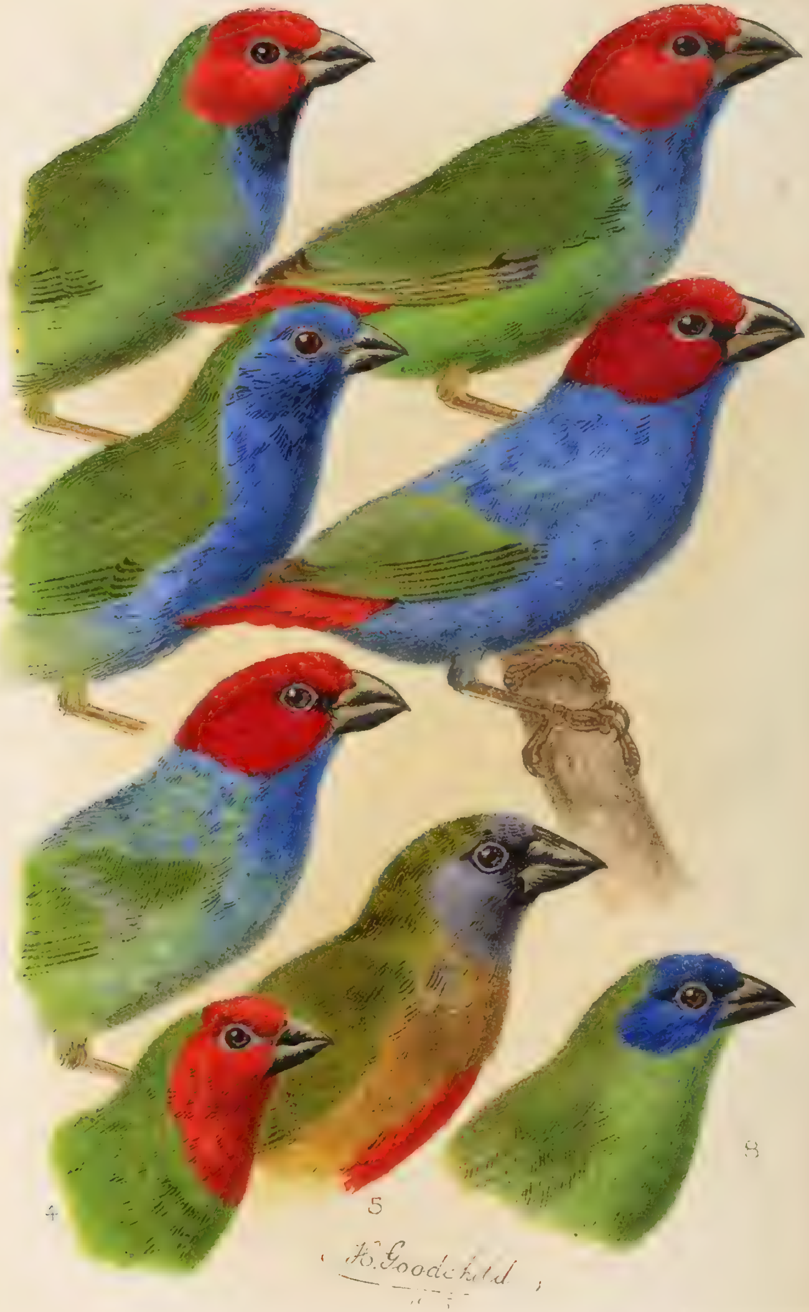
Magpie Mannikin: Five young in July, but all met an untimely death after after leaving the nest; a Shama believed to be the culprit. A second brood of four are all fending for themselves.

Violet-eared Waxbill: The first clutch of eggs were infertile. of the second clutch, three chicks were duly hatched, but only survived a few days. They promptly went to nest again and laid a clutch of five eggs, three or four of which have hatched out, the young at time of writing are three days old and doing well.

Silver-eared Mesia: These appear to have played at housekeeping all through the summer until now, when I discover in a laurel bush a splendid natural nest with three eggs set.

There have been other successes of minor importance.

Tonbridge, 30/8/'14. G. SCOTT-FREELAND.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H. Goodchild

PARROT FINCHES.
Erythrura.

KEY TO PLATE.

1. *Erythrura pealii*—Peale's Parrot Finch.
2. *E. tricolor*—Blue-breasted Parrot Finch.
3. *E. cyanovirens*—Blue and Green Parrot Finch.
4. *E. psittacea*—Common Parrot Finch.
5. *E. prasina*—Pin-tailed Parrot Finch.
6. *E. serena*—Blue-collared Parrot Finch.
7. *E. regia*—Royal Parrot Finch.
8. *E. trichroa*—Three-coloured Parrot Finch.

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BIRD NOTES:

— THE —

JOURNAL OF THE FOREIGN BIRD CLUB

Parrot Finches *(Erythrura).*

By Wesley T. Page, F.Z.S., Etc.

The water-colour drawing, from which our plate has been reproduced, was drawn by Mr. H. Goodchild more than twelve months ago, and its appearance has been much anticipated by those aware of its existence. In this instalment the space at my disposal is so small that I can do no more than briefly review the species of which the British Museum catalogues eleven, leaving those species known to English aviculture to be comprehensively dealt with in next and following issues.

The Pin-tailed Parrot Finch (*E. prasina*) Fig. 5 on plate. This species, commonly known as the Pin-tail Nonpareil, is too universally known to call for description, and aviculturally it will be dealt with later.

Habitat "From Southern Tenasserim, down the Malayan Peninsula to Sumatra, Java, and Borneo." B.M.C. Vol. XIII.

The Common Parrot Finch (*E. psittacea*). Fig 4 on plate. Again description is uncalled for, as sex distinctions, treatment, etc., will follow later.

Habitat. "New Caledonia." B.M.C. Vol. XIII.

Peale's Parrot Finch (*E. pealii*). Fig. 1 on plate.

Description. Rich grass-green; quills brown; rump, upper tail-coverts and central tail-feathers scarlet; outer tail-feathers blackish, outer webs suffused with scarlet; top of head, sides of face, ear-coverts, and cheeks rich scarlet; lores dusky; throat dusky-black; lower throat strongly suffused with blue and merging into the grass-green of the remainder of the underparts; beak blackish; legs and feet brown; iris black. Total length $4\frac{1}{4}$ inches, tail $1\frac{1}{4}$.

Habitat. "Fiji Islands." B.M.C., Vol. XIII.

Blue and Green Parrot Finch (*E. cyanovirens*). Fig. 3 on plate.

Description. Similar to *pealii,* but has no black on the throat, and the scarlet of the head extends over the nape, the throat is blue, and the whole of the under surface and mantle more or less suffused with blue: beak black; legs and feet blackish-brown; iris brown. Length &c., as *pealii*.

Habitat. "Samoa Islands," B.M.C., Vol. XIII.

Blue-collared Parrot Finch (*E. serena*). Fig. 6 on plate.

Description. Similar to *E. syanovirens*, but having the scarlet of the nape separated from the green of the back by a broad blue collar: beak blackish, legs and feet brown. Total length $4\frac{1}{4}$ inches, tail $1\frac{3}{8}$.

Habitat. "Is. of Aneiteum, New Hebrides." B.M.C., Vol. XIII.

The Royal Parrot Finch (*E. regia*). Fig. 7 on plate.

Description. Body plumage rich blue; wings green, the flights brown, with the outer margins more or less green; forehead, crown, nape, sides of face, ear-coverts, and cheeks, rump and upper tail-coverts intense scarlet; lores dusky. Total length 4 inches, tail $1\frac{1}{2}$.

Habitat. "Is. of Api, New Hebrides," B.M.C. Vol. XIII.

The Three Coloured Parrot Finch (*E. trichroa*). Fig 8 on plate.

The appellation "Three-coloured" would have been better given to *E. tricolor* and to have called this species the Blue-masked, but as it has been known as Three-coloured for some years it must remain so.

Description. Green; forehead, fore-crown, sides of face and ear-coverts blue; rump and upper tail coverts dull scarlet; tail blackish with the central feathers dull crimson; beak black; legs and feet brown; iris blackish. Total length $5\frac{1}{4}$ inches, tail $1\frac{7}{8}$.

Habitat. "Moluccas, New Guinea, Caroline and Solomon Islands." B.M.C. Vol. XIII.

The Blue-fronted Parrot Finch (*E. cyaneifrons*).

Description. "Similar to *E. trichroa*, but smaller and with a decidedly smaller bill. Total length 4.5 inches, tail 1.75." B.M.C. Vol. XIII

Habitat. "Loyalty Islands; New Hebrides." B.M.C., Vol. XIII.

Forbes' Parrot Finch (*E. forbesi*).

This species, common to the Tenimber Islands, resembles ***E. tricolor***, but has the hind head entirely green like the back. Total length 4 inches, tail $1\frac{1}{8}$.

Blue-breasted Parrot Finch (*E. tricolor*). Fig. 2 on plate.

The cognomen, Three-coloured, being already appropriated by *E. trichroa*, I have named this species as above, as it is the only one of the species described herein, which can be distinctively so called.

Description. The upper plumage is rich grass-green; forehead, fore-crown, sides of face, ear-coverts, cheeks, sides of neck, throat.

The Tejon Pass.

The Sierras.

Photos by W. Shore Baily

breast and upper abdomen ultramarine-blue; rump, and upper tail-coverts scarlet; tail-feathers, dusky brown with dull red outer webs. Total length 4 inches, tail $1\frac{1}{8}$.

Habitat. "Timor." B.M.C., Vol. XIII.

KLEINSCHMIDT'S PARROT FINCH (*E. kleinschmidti*).

Descriptions. "Front, forepart of cheeks to the posterior edge of the eye, and chin black; vertex obscure blue; upper-surface dark "grass-green, the same as the outer edges of the remiges, which are blackish-brown like the tail feathers; upper tail-coverts splendid scarlet-"red; under-parts grass-green, much brighter and lighter than the upper "parts; ear-region bright greenish yellow; under wing-coverts isabel-"line; bill and feet ivory-yellow in the skin, in the living bird apparently "flesh-coloured; nails dark brown. Total length 4 inches, culmen 0.6, "wing 2.5, tarsus 0.85."

"*Habitat.* Viti Leon, Fiji Islands." B.M.C. Vol. XIII.

The foregoing descriptions with the exception of *cyanovirens* and *kleinschmidti*, which are from the "British Museum Catalogue," are either from skins or life as under:—

prasina, *psittacea*, *pealii*, and *trichroa*—from living specimens.

cyanovirens, *serena*, *regia*, *forbesi*, and *tricolor*—from skins.

(*To be continued*).

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A Journey Across the Sierras, S. California.

BY WM. SHORE BAILY.

Continued from page 302.

About a mile below the pass was a good sized ranch house, surrounded by a grove of large trees, including oaks and walnuts; a pleasing change after the cotton woods and willows, which are about the only trees natural to the valley. Under one of these trees we pitched our camp, and very glad we were to do so, as we had covered 45 miles of very uninteresting and dusty country. After supper I took a stroll around. On a stale Alfalfa patch a pair of Kildeer Plovers (*Aegialitis vocifera*) were wheeling, but a diligent search failed to find their nest, although I met with a nest of the Yellow-breasted Lark. Probably the Plovers had young, hiding in one of the clumps of Alfalfa. Their actions were exactly similar to those of our Lapwings under similar circumstances. On one side of the field a mountain stream rushed down, only to lose itself a mile or so further on by percolation and evaporation. The further bank was twenty feet or so above the water, and in this a colony of Bank Swallows (*Cotile erythrogaster*) were nesting. In flight they look exactly like our Sand Martins; the eggs also are similar. This was probably the only nesting site that they could have found in many miles, as higher up the banks of the stream are rocky. In a creeper growing around the verandah of the house, a pair of Red-headed Linnets (*C. purpureus*) were nesting. They are pretty and confiding little birds—prefer nesting near houses. The inevitable Oriole (*Icterus bullocki*) was also nesting near the house, the nest hanging very much as do some of the African Weavers. The Rancher, a one armed old timer, seeing me examining the nest, pointed out to me the nest of a Chicken Hawk, and said that he would be very glad if I would shoot the old birds for him, as they were daily carrying off his chickens. I don't usually shoot birds unless they can be used for food, but in this case, as we were camping on his ground, I thought it well to do so. They were very fine birds. The hen which flew off the nest in time to receive the contents of my second barrel, being much the larger bird of the two. The eggs, four in number, were large and very pretty—buff, thickly blotched with reddish-brown. The next morning as we were starting, the old rancher appeared with a well-grown Plymouth Rock cockerel; "just a suthen fur yer fur killen them darned Chicken Hawks. Guess you'll find a use fur en before yer get t'other side." We guessed we should and thanked him.

Our way now was up a steep gradient. Right in the mouth of the canyon was a high hill, and on this the old fort Tejon originally stood. It must have been quite impregnable from any Indian attacks. The mountains on either side,—there are no foothills,—were quite bare of timber or "chapparal,' and were covered with long grass. The valley itself was for a considerable distance mostly sand and rock, but when it began to narrow, the soil improved and willows and other shrubs began to appear. Further up still, we struck the "chapparal" belt. Here the mountain sides are densely covered with various kinds of shrubs, conspicuous amongst which is the Mauzanita with its blood red bark. We now

The Chapparal Country.

Photo by W. Shore Baily

again saw plenty of bird life. About the commonest and certainly the handsomest bird seen was the Blue Jay (*Cyanocitta stelleri frontalis*); its tail, wings and the lower parts of its body are a rich blue, the upper parts and head including crest, a brownish black. After four or five hours' steady ascent, most of which we had done on foot, we reached one of the large valleys, which are found all through these mountains. Here the scenery again completely changes. Oaks, both evergreen and deciduous, are the principal trees, but in places magnificent pines of various kinds are found. Here and there small lakes are also to be seen, looking very pretty between the trees. Altogether it is a very park-like country, and a splendid one for stock raising. As for the birds, this is one of the homes of the Californian Pied Woodpeckers. There are two kinds in this valley. The Common (*Melanerpes formicivorus bairdi*) and the Red-breasted (*Sphyrapicus varius*). The former is found all through California and is especially common where oak trees abound. It has a very curious habit of drilling holes in trees and filling them up with acorns. I have seen hundreds of these embedded close together and stuck in so tightly that you couldn't pull them out with your fingers. Another and much rarer bird is the large Black and Grey Woodpecker or Nutcracker (*Picicorvus columbianus*); when flying it looks as large as our Jackdaw. We saw a pair of these birds enter a hole in a tree about 20 feet from the ground. I should much have liked to examine it, but we couldn't spare the time. Our luncheon this day was taken on the banks of a mountain stream, and under the shade of a fine live oak. Very much pleasanter surroundings than we had the previous day. While we were resting we had the opportunity of watching a Kingfisher (*Ceryle alcyon*), taking fish. He was a considerably bigger bird than our English one, but acted in just the same way, darting into the water from a branch just over the stream, and returning to the same branch with his prey. The fish were fingerling trout, or more properly speaking, char, the Rainbow Trout being only found in the larger rivers. After lunch the going was easier, the ascent being much more gradual, and we made good progress. The Black and White Woodpeckers were the commonest birds, but we also saw a pair of Bald Eagles (*Haliactus leucoce-*

phalus) circling above the mountains. From their screams we gathered that they must have some game in sight. Probably a fawn or calf. These are much rarer in California than the Golden Eagle, and are not nearly so easily approached. About two hours before sundown we reached the Divide, and pitched camp on the sheltered side. Whilst my partner prepared the yellow-legged cockerel for supper, I took my gun, and went out to try for a Mountain Partridge (*Oreortyx pictus*). Close seasons are, I am afraid, ignored on a trip of this kind, when butcher's meat is not obtainable. I found a considerable flock of these handsome and uncommon birds, but failed to get a shot at them. They are something like the Valley Quail (*Lophortyx californica*) but are nearly equal in size to our Partridge. Amongst other birds seen was the American Robin (*Turdus migratorius propinquus*); a variety of Thrush with a rufous-coloured breast, very common whereever there is timber or chapparal. A much rarer bird is the Hermit Thrush (*Hylocichla ustulatus*), it is marked like our English Thrush, but is very much darker in colour. Unlike the Robin it is a very shy bird, and I have only seen it on two or three occasions. On my return to camp, my partner had the chicken ready for consumption, and consume it we did; the keen mountain air having given us useful appetites. At this night's camp we had a comfortable bed of pine needles, than which nothing can be more luxurious on this kind of trip. I was aroused in the night by the barking whistle of a White-tailed Deer. We found in the morning that it had approached within twenty yards of the camp. Like the Antelope, they are often attracted by anything they can't quite understand, and this is especially so at night. Many a one has paid for its curiosity with its life.

The next morning we crossed the Divide. Below us was a much larger valley than the one we had just come through. The trail led at first for some miles along the ridge. This was heavily timbered with pines of various kinds, many of them of very large size. Here we saw a variety of Tree-Creeper, that I have not met with elsewhere—which I cannot identify. Its back and head were bright sky blue, and the under parts greyish white. It was a most striking looking bird, both in flight, and when creeping up the pines. There were several pairs. Woodpeckers were also numerous. After a mile or two, we began to descend. In front of us was a large pond or lake, on which a flock of duck were feeding, principally Mallards (*Anas boscas*) and Pintail (*Daphila acuta*) and as far as I could see mostly males. As we wanted meat for supper I took the gun and tried to stalk them. There was no cover and I failed to get near them, but fortune favoured us, as when they were on the wing a Falcon (*Falco peregrinus anatum*) swooped at them from out of the blue and scattered them in all directions. Having failed in its first attempt, it singled out a Pintail, and quickly overhauling it struck it to the ground. As it happened, it fell within a short distance of my partner in the waggon, and he was able to rescue it before the Peregrine had begun to tear it. There was also a small flock of Grebes on the pond. They did not suffer a very near approach, but looked from the distance much smaller than the Hell Divers (*Podicipes podicipes*) of Buena Vista. It is possible that they might have been half grown young. The valley we were now following was not heavily timbered, but here and there were a few fine oaks. Feeding under these were nearly always a few greenish-yellow Woodpeckers, locally known as Yellow Hammers (*C. chrysoides*). These birds are more or less gregarious and spend much of their time on the ground, looking for ants and other ground insects. They are considered good eating by the Ranchers. Another bird met with in this valley was that very interesting creature the Road Runner (*Geococcyx mexicanus*). It is, I believe, a variety of Ground Cuckoo. It is about the size of a hen Pheasant, and its long tail makes it look a little like one. Its speed is phenomenal and our dog had quite a long chase before he made it take wing. When it did do so, it simply planed down to a lower part of the valley, apparently not moving its wings at all. I have seen this bird perched on a low fence in New Mexico, but I am inclined to think that it rarely leaves the ground or uses its wings unless pursued. It lives on young snakes, lizards, etc., and is consequently most strictly preserved throughout the West. Notwithstanding this, it is, I consider, a rare bird in most parts of California.

(*To be continued*).

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Some Experiences of Cockatoos.

BY THE MARQUIS OF TAVISTOCK.

(Concluded from page 291.)

Worse was to follow: not long afterwards, I returned home after a short absence, to be met with the bad news that Teddy was ill and had been taken in. I at first feared that he might be suffering from the same malady as the hen I had just lost, but I changed my mind on finding that he was in good condition, and quite plump. The night before his illness had been cold and foggy, and as he was moulting a little at the time, I have little doubt that he had contracted a chill. As he always appeared cramped and worried in a cage to which he had never been accustomed, I gave him his liberty in a large room heated by a stove to the temperature of 65 deg. (Had it been 85 deg. I should probably have saved him, but, alas! I did not then know the value of great heat for ailing birds). He did not really seem very bad, for although he spent a great deal of time with his head under his wing, he became quite lively in the evenings and early mornings, walking about and calling loudly. On one occasion I actually saw him stretch his wing a little—a sure sign that a bird is far from being *in extremis*! Unluckily, however, his appetite had completely deserted him, and the food we gave him was dropped untasted. We tried him with everything we could think of—mealworms, gentles, nuts of all kinds, sponge-cake, and bread flavoured with aniseed, bread and milk and even meat and butter—all without avail. His endurance was marvellous, for at the end of four days, though thin, he was not outwardly much the worse for his fast. On the fifth day, however, he began to weaken rapidly and could only fly a short distance and on the sixth day he was very far gone indeed, and crawled away into a corner behind the stove. In desperation and as a last resource I tried forcible feeding with sponge cake and port wine. Teddy much resented the indignity of being handled but I believe he knew we meant well, for he would always come out when we called him and climb weakly on to our arms and when we caught hold of him he never screamed and made little attempt to bite. But it was no use. Of all large birds a Parrot is quite the most helpless to try and cram on account of the small size of its gullet and the immense power of its mandibles, so on the 8th day the end came. Poor Teddy! He was the finest bird I ever had, the most interesting and, with the one exception of my Little Owl "Peeps," the most intelligent and companionable. In two ways I might have saved him, and I learned both some months too late! Fate having deprived me of Teddy now decreed that I should have my last hope of a breeding triumph dashed to the ground. Early in the winter I moved the Zoo cock into the indoor compartment of a large aviary, together with Timmie, whom I thought it prudent to shut up. At first, owing to long confinement, he was quite unable to use his wings, but his powers of flight soon returned and once he had gained the upper perches he never seemed disposed to descend again to the ground. Then in an evil hour I gave orders that a small space should be left at the bottom of the door of the aviary to enable Quails and other small birds to come in and enjoy the warmth. I never dreamed that the Banksian would find this opening, let alone squeeze through it, but the fact remains that he did and was soon at liberty. It does not take long to relate what followed; Toby, lonely and restless, after many weeks of solitude, gladly joined him on hearing his cries. The two rose into the air and I never heard of either of them again!

But even this was not the end: a few weeks before this fresh disaster I had bought another young hen Banksian, which, after the Zoo cock's departure, I put into the aviary with Timmie. At the same time I unwisely introduced the old roseate Cockatoo, which, as I have said before, I now believe to have been responsible for one of my first losses. The new arrival was strong and healthy and although shy, was not unduly nervous, and had no prejudices in the matter of diet. She was extremely glad to see Timmie who on the other hand was rather afraid of her and viewed her with disfavour. For a time things pursued an uneventful course, and although I once or twice noticed that the young hen seemed to be a bit clumsy in climbing out of the feeding tray, I did not realise that anything was wrong. The crisis came suddenly when one morning I entered the aviary to find Timmie bundled up in a corner, as sick as she could well be. We caught her and found her to be a mere skeleton; we caught the young hen and found her a trifle worse. The old Roseate

I had destroyed, and he proved to be as badly infected with tuberculosis as a bird could be. 'After the death of Teddy and the loss of Toby and her companion, I felt that nothing could hurt me much, yet this last catastrophe had a kind of completeness about it which could not fail to cause a final pang. Sadly, therefore, I ordered the two sick birds to be caged and placed in a warm room—it seemed a pity to kill them when they were so valuable, though I doubted whether it would not be the most prudent and merciful thing to do—and then I went out into the garden to meditate on the atrociousness of aviculture as a hobby. A whistle in an oak tree above my head made me look up to see an Adelaide Parrakeet holding a brown object in her foot, which she was breaking to pieces industriously. Presently she dropped it, and picking it up I found it to be an oak-apple with one side bitten away and the grub neatly extracted from the centre. "Well," I thought to myself, "I tried Teddy with almost every imaginable kind of food, but I certainly did not offer him oak-apples, so here goes." Accordingly I collected a few and took them into the birdroom. Timmie was in a very bad way, her appetite was small and capricious, and she was running at the sides of the beak just like the bird who had died. At first she would take no interest in the unfamiliar object I offered her, but after a good deal of coaxing I persuaded her to taste one of the little white grubs. She swallowed it and finding it better than she expected took a second. Decidedly they were good and in a very short time she was calling so eagerly for fresh supplies that she attracted the attention of her companion in the next cage and I had little difficulty in inducing her also to accept the new dainty. From that time on oak-apples formed an important item in the daily menu, and the Cockatoos quickly learned to bite them open and extract the tiny grubs with the tips of their tongues in so skilful a manner that it was difficult to believe that they were not indulging in their natural diet. Banksians are, of course, largely insectivorous in a wild state, but the wood-boring larvae they find in their own home are said to be of very large size indeed. For a few days the sick birds' condition remained unaltered. Then a change for the worse manifested itself in Timmie, she refused all food but grubs, and even these had to be extracted for her, and what little she swallowed was generally vomited again in a few minutes. The diarrhæa from which she had been suffering became worse and the running at the beak increased. Her temper also, probably under the influence of pain, became extremely savage and she rushed at everyone who approached her cage and bit angrily at the wires. Most of her time she spent in tearing up a large piece of soft wood with which we had provided her. The end seemed very near. Strange to say, however, after a few days, a slight improvement set in and the acuteness of the symptoms abated. During the weeks which followed this improvement was maintained, although it was extremely slow. Gradually the vomiting became less frequent, the diarrhæa ceased, Timmie began to put on flesh and her temper grew more amiable. The young hen, who had never shown any marked symptoms of illness, also improved greatly in condition and was soon engaged in a normal and healthy moult. By early spring it became evident that the miraculous had happened and that the remnant of my ill-fated flock had been saved when in the very last stage of what is generally regarded as one of the most hopeless and intractable of all bird ailments. Then it was that the sad conviction forced itself upon me that if I had only learned the value of oak-apple grubs a few months sooner my beloved Teddy would have been saved. His illness was in reality far less serious in character than that of the hen, and all he had needed was some stimulus to arouse his appetite.

When summer arrived I put Timmie and her companion out-of-doors in cages, and they soon began to testify to the completeness of their cure by the excellence of their spirits and the outbursts of excited screaming in which they sometimes indulged when the call of a Rook, uttered with a peculiar intonation, reminded them of the distant cry of one of their own kind. The young hen began to lose her shyness, and although she did not like one to put one's hand quite close to her, she showed great pleasure if one stood a little distance away and talked to her, throwing up her crest, spreading her tail, swinging her head about, and even bringing up food from her crop. Banksians are strange birds, there is nothing quite like them !

In July I made up my mind that it would be safe to allow Timmie her liberty and had no cause to regret my decision for she remained in the best of health until I caged her again in the autumn. Nearly a year has passed and she is once more enjoying her freedom. Her plumage is bright and glossy, her breast round and plump; sometimes she flies on to a chimney and looks inquisitively down the mouth as if she had thoughts of nesting. The young hen is equally well, though I have not ventured to let her out. O "fragilem fortunam"!

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Aviculture in the Days of Ancient Rome.

BY DR. L. LOVELL-KEAYS, F.Z.S.

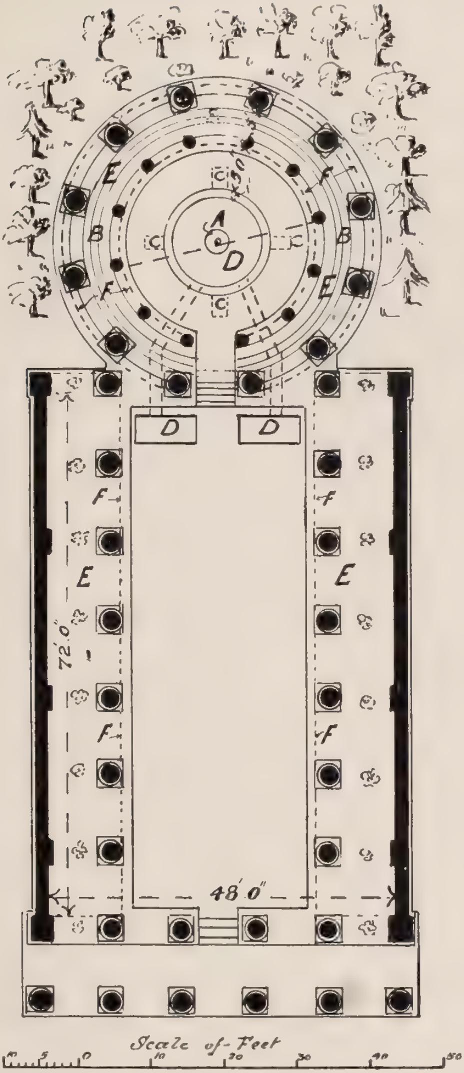
[Our member, Dr. P. Gosse, sent us nearly twelve months ago a book ("Varro on Farming,") containing some interesting details of ancient aviculture, which, he thought, would probably be interesting to readers of "Bird Notes." We agreed, but hitherto it has been held up owing to lack of time for its compilation—this continuing, Dr. Lovell-Keays, on request, kindly consented to undertake the task, and the following most interesting paper is the result. We are greatly indebted to Dr. Lovell-Keays, and also to Dr. Gosse, and tender our appreciative thanks.—ED.].

To say there is nothing new under the sun is, of course, trite and commonplace but nevertheless undeniably true. At any rate, aviculture, both as a hobby and a commercial undertaking, is pretty accurately described by one Varro, who was born in B.C. 116 and was noted for the number of books on various subjects that he wrote, the number being no less than four hundred and ninety (what a valuable member of the F.B.C. Mr. Varro would have proved to our present Editor!). And his prolixity in no way impaired his accuracy or thoroughness. His remarks are made principally to Axius, who must have been the prototype of the aviculturist, who, although well blessed with this world's goods, yet one to whom the prospect of "making a bit" out of his hobby appealed irresistibly. At any rate Varro takes the kind of aviary run entirely for profit first, and describes it as a domed building, a peristyle as it were, covered with tiles or a net. In this were kept several thousands of Fieldfares, and Blackbirds, but Quails and Ortolans were a welcome addition, as when fattened they fetched a good price. Varro lays great stress on a good and sufficient water supply, and prefers that it should be a slow stream running continually through shallow and narrow troughs, so that these may be frequently cleaned; the overflow should be carried away by a pipe to prevent the formation of mud. Entrance was to be effected by means of a "coclia" or rotating cage, similar, I take it, to the exit arrangements at certain parts of our London Zoo. The windows were to be few, lest the hapless victims, seeing birds and trees outside should pine, but sufficient light allowed to enable the birds to find food and water, and to locate their perches. The doors and windows were to be surrounded with smooth plaster to exclude mice and other undesirable aliens. Varro evidently appreciated the fact that softbills cannot live on grain, for he recommended, as food, cakes made of figs and barley, well mixed together and rolled. Besides perches and ladder-like erections for the birds to rest on, he suggested the walls should be furnished with shelves and recesses. The object of these was (1) for the birds to hide in and (2) that aviarium (=aviary attendant) might deposit the bodies of the birds that died a natural death. It is thus comforting to know that the unexpected death of one's best birds is not an altogether modern exasperation. The birds remained in the main aviary until a public feast or other excuse for eating arose, when they were transferred to the Seclusorium, which was rather lighter and the aviarium was admonished to kill those appointed to die" in secret and away from the others, lest these, seeing it, should mope, and die at a time inconvenient to the seller." This last sentence rather suggests that at times the feast had either to be hurried on or indefinitely postponed according as whether the birds were ill or well, although Varro does not specifically say so.

Varro, in writing to Axius makes a few naïve remarks on the habits of Fieldfares, and informs him that they do not nest on the ground like other immigrant birds such as the Stork, nor under the roof like Swallows. He places the period of immigration at the autumnal equinox and the return of the birds at or about the spring equinox. He does not venture on their ultimate destination but remarks on the migration of the common Quail and Turtle-Dove. Finally Varro deals with the question of £ s. d. The balance-sheet is not a very inclusive document but one learns that if a public feast or a triumph is to take place you may reckon on selling five thousand fattened Fieldfares for 60,000 sesterces (about £480) and he adds "You may then lend them out at good interest"; with these words he disposes of the purely mercenary aviary and deals with the aviary built for pleasure. Apparently a gentleman named Mr. Laenius Strabo was the inventor of the aviary for ornamental birds, and in those days of Caesar we find aviculturists vieing with one another as to who should have the largest aviaries and the best birds.

Varro, too, seems to have been bent on impressing upon Axius the splendour of his establishment, for he says "You *must* know that near the town of Casinum I have a river flowing through my grounds. It is clear and deep (no sewage-contaminated mud-pools for Varro!) with stone kerbs. Its breadth is fifty seven feet so that bridges are necessary to cross from one part of the villa to the other: its length is 950 feet . . . ." and so on in the style so familiar with the egregious braggart of 1914. It was on the banks of the stream, separated by an uncovered path 10 feet wide that Varro's aviary stood. The aviary was shut in on both sides, right and left, by high walls. Between these walls is the aviary" fashioned like a boy's writing tablet with its ring at the top." The rectangular portion measured 48 feet by 72; the upper end where it is circular 27 feet. At the and opposite the circular part there is a walk which runs entire the width of the aviary. On entering the aviary proper, and immediately to one's right and left were two recesses known as "plumulae," corresponding to our "bird-rooms," in which no doubt were kept new arrivals, pugnacious birds, ailing birds, and so forth. As we step into the aviary we are not confronted by birds flying hither and thither, for the central portion is simply a walk or auditorium flanked on either side by colonnades, the front columns of which were stone, whereas the back of the colonnade is formed by the high walls, already referred to, which form the boundaries of the aviary. Between the wall and the stone columns were planted dwarf trees. The two aviaries on either side of the walk were completed by throwing a hempen net over the

PLAN OF THE
BIRD-HOUSE
AT
CASINUM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F
F
F
72' 0"
48' 0"
Scale of Feet
10
5
0
10
20
30
40
50

A	Island
B	Staging
C	Duck-Houses
D	Ponds
E	Aviaries
F	Netting

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colonnades, the net reaching from the wall at the back to the ground in front of the stone columns. The birds were fed through the net, and we are told a tiny stream flowed through the aviaries to water the birds. This completed the arrangements of the main aviaries on either side of the walk. But this by no means exhausts the number of aviaries, for at the far end of the walk were steps leading into a circular "tholus" beyond. Just before the steps were reached were two oblong ponds marked D in the plan and there connected by underground pipes with the Duck pond inside the circular part of the building or tholus to be presently described. This tholus was indeed a complicated device and consisted of a circular aviary proper on the extreme outside, and 5 feet wide; next came a kind of circular raised dais also 5 feet wide and finally a circular piece of ornamental water with Ducks, Duck-houses, Goldfish, and so forth. Finally, in the extreme centre was an island. As regards the aviary: this was formed by a series of stone columns on the exterior and columns of fir on the inside. A net of gut was thrown over the outer or stone columns, but an ordinary fowling net over the inner or wooden columns. Outside the aviary was a plantation of trees and outside this again a high wall. Within the aviary were tiers of seats and shelves attached to the columns for the birds to perch and roost in. The space adjoining the inner limits of the aviary was meant for the guests of Varro and consisted of various ingenious devices to sit and watch the birds in the aviary and at the same time they themselves could partake of some sort of meal by means of a kind of turn table, the pivot of which was exactly in the centre of the Island A (*see diagram*). Finally within and below the level of the platform on which the guests reclined was a small circular pond about 10 feet in diameter, with an island in the centre. This pond was fed by a small stream and communicates with the two rectangular ponds already mentioned in the rectangular aviaries. Mention must be made of the Duck-houses, which were recesses cut out underneath the guests' platform.. Altogether aviaries in circa B.C. 50 must have been pretty elaborate and somewhat costly to construct. Varro does not mention what kind of birds were kept in this wonderful aviary beyond saying that "birds of all kinds, mostly songsters, such as Nightingales and Blackbirds" were kept. I have purposely omitted much detail such as the fact that hot and cold water was laid on in the circular aviary for the guests to wash their hands, but I trust that my remarks together with the plan will make my meaning clear. I must confess that the original required a great deal of puzzling out and I can only hope my labours will result in interesting our readers.

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An Easter Tour Among Members' Aviaries.

By Wesley T. Page, F.Z.S., M.B.O.U.

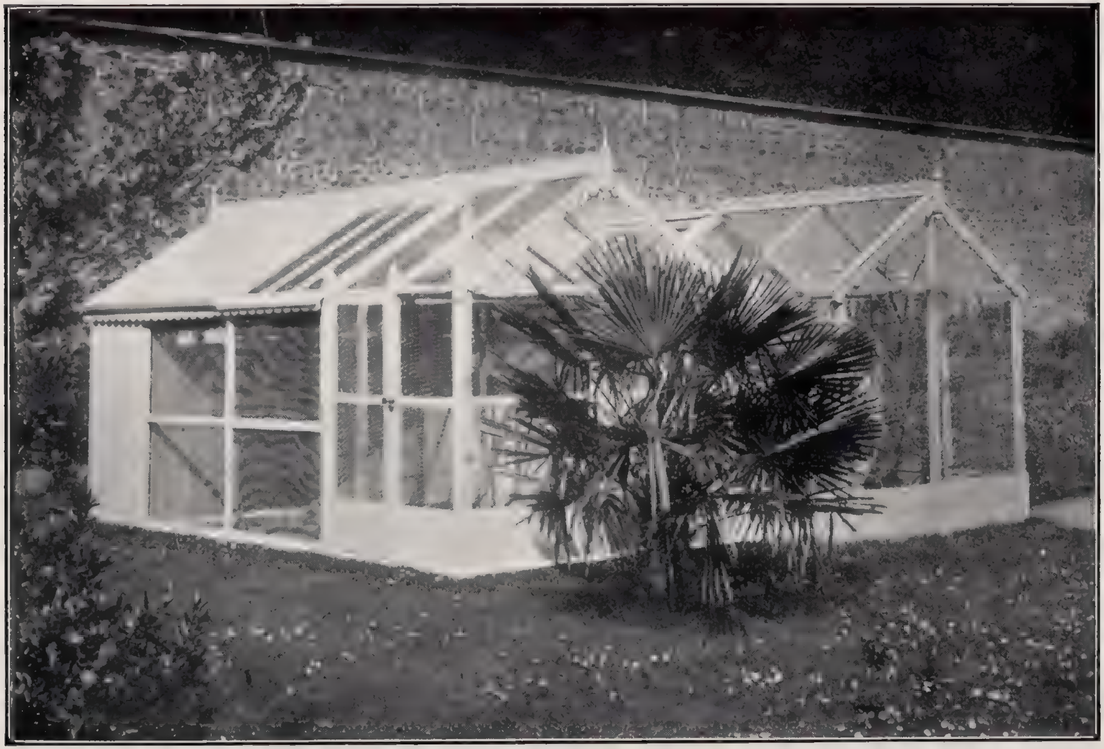
(*Continued from page* 298).

Mrs. Pope's Aviary: Owing to the time spent at Exeter, we were a little late in arriving at Tiverton, where Mrs. Pope kindly entertained us to lunch, which had to be held up pending our arrival. Mrs. Pope is a new adherent to aviculture, in fact only joined the F.B.C. in February of this year, but she is already very keen and possesses a very nice aviary, quite a roomy one, with thatched roof and portable glazed sashes to enclose it during the cold months of the year. It was snugly furnished, quite a number of cosy-corners being arranged, also a goodly array of nest receptacles, of almost every type, and many personal contrivances which added to the comfort of the birds, and incidentally also to the duties of attendance. Along the back of the aviary was a light wood framing, covered with coarse mesh wire-netting, fixed some few inches from the wall, the space between netting and wall being filled with hay and moss several birds were incubating therein. We were shown the site of a prospective aviary and talked of many things concerning it.

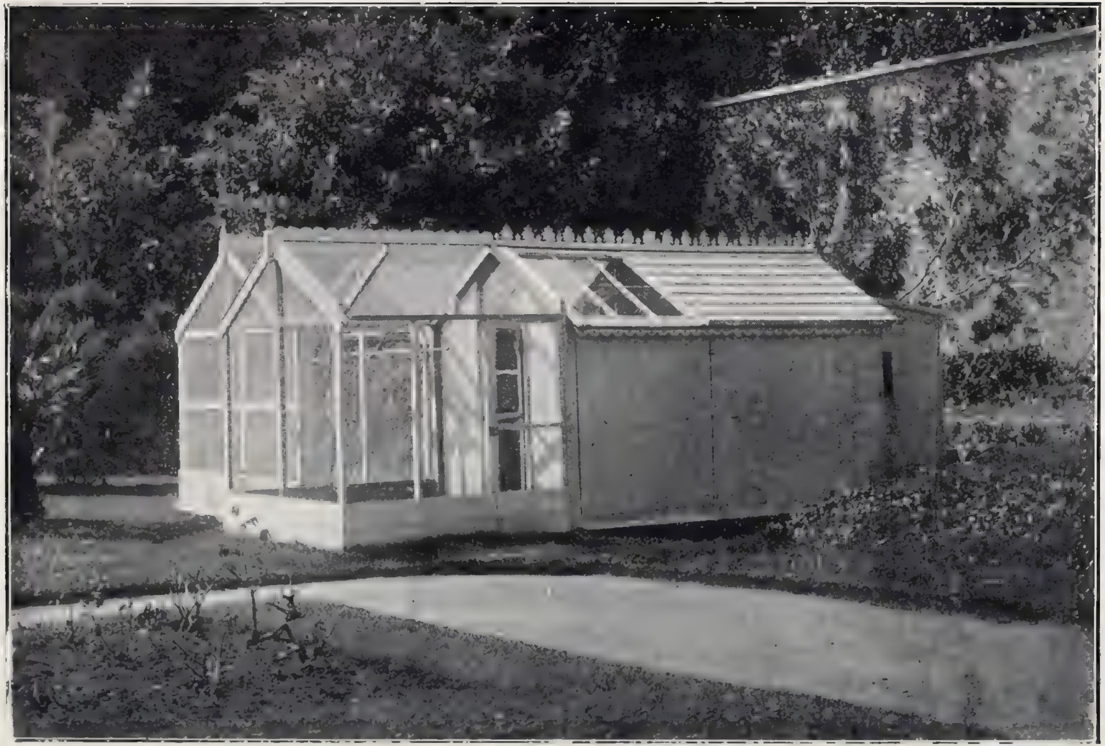
Mrs. Pope's birds were mostly *Fringillidae* and *Ploceidae*: We noticed the following species:—

Orange-cheek, Grey, and Gold-breasted Waxbills; Tri-colour, Bronze, Black-headed and White-headed Mannikins; Zebra, Fire-, Grey-, and Green-Singing, and Ribbon Finches; Orange, Napoleon, and Red-billed Weavers; Avadavats, Silverbills, Pekin Robins, Bearded Tits, etc., in most instances several pairs of each.

After viewing the birds a most enjoyable time was spent in the garden, not only in admiring both the cultivated



A Pair of La Baronne le Clement de Taintegnies' Aviaries. *Photo by A. Vowles.*



A Pair of La Baronne le Clement de Taintegnies' Aviaries. *Photo by A. Voules.*

and wild flora, but also the avifauna, which was both numerous and interesting. However, it had to be cut short as we were staying at Minehead for the night, so adieus were spoken and we set out for the next call.

La Baronne de Taintegnies' Aviaries: Here, after an almost adventurous climb with the car to "Cleveland," we found our hostess awaiting us with tea prepared, and after thus refreshing ourselves we adjourned out of doors to view the aviaries and birds. Our hostess being an aviculturist of many years' standing, our peregrinations from aviary to aviary were interspersed with many birdy episodes and terse records of breeding successes. The type of aviary favoured was most excellently adapted for the grounds and garden, which are situated upon a steep hill-side. In the first instance they are of a portable type, but have had the flights considerably enlarged and also protected by screens of glass and wood on the exposed sides, and they certainly make admirable quarters for their occupants, as well as being handsome and interesting adjuncts to the garden. The photo-reproductions accompanying these notes make elaborate detail unnecessary. The Baronne's speciality being Parrakeets, these largely predominated, and among others we gleaned that Stanley Parrakeets (*Platycercus icterotis*), and Blue-Mountain Lorikeets (*Trichoglossus novae-hollandiae*) had been successfully bred here. However, the *Fringillidae* and *Ploceidae* were also represented in certain of the aviaries, but unfortunately, owing to arriving late, our stay was quite a short one, and I did not make a complete list, but roughly noted such species as caught my eye in passing the respective aviaries, as follows:

Parrakeets: Half-moon, Jendaya, Rosella, Pennant's, Stanley's, Alexandrine, Bauer's, and Quaker. Doves: Bar-shouldered, Diamond, Senegal, Turtle, etc. Budgerigars, Black-cheeked and Madagascar Lovebirds and Cockateels were present in some numbers, especially the first named, and most entrancing they were as they disported themselves on the wing in their roomy enclosure (see plate). Canaries, Zebra Finches, Mannikins, Weavers, etc., were also present in some numbers but I have no list of these.

There were two aviaries of the wilderness type (*see plate*) each of good size, but containing many members of the Parrot-tribe, plant life was mostly confined to grass and herbage, but aviaries and birds were well kept, the general conditions bespeaking personal care and oversight.

In cages were grand specimens of the Greater Sulphur-crested Cockatoo, Blue-fronted Amazon and Grey Parrots, all being good talkers, especially the last two, which were most entertaining.

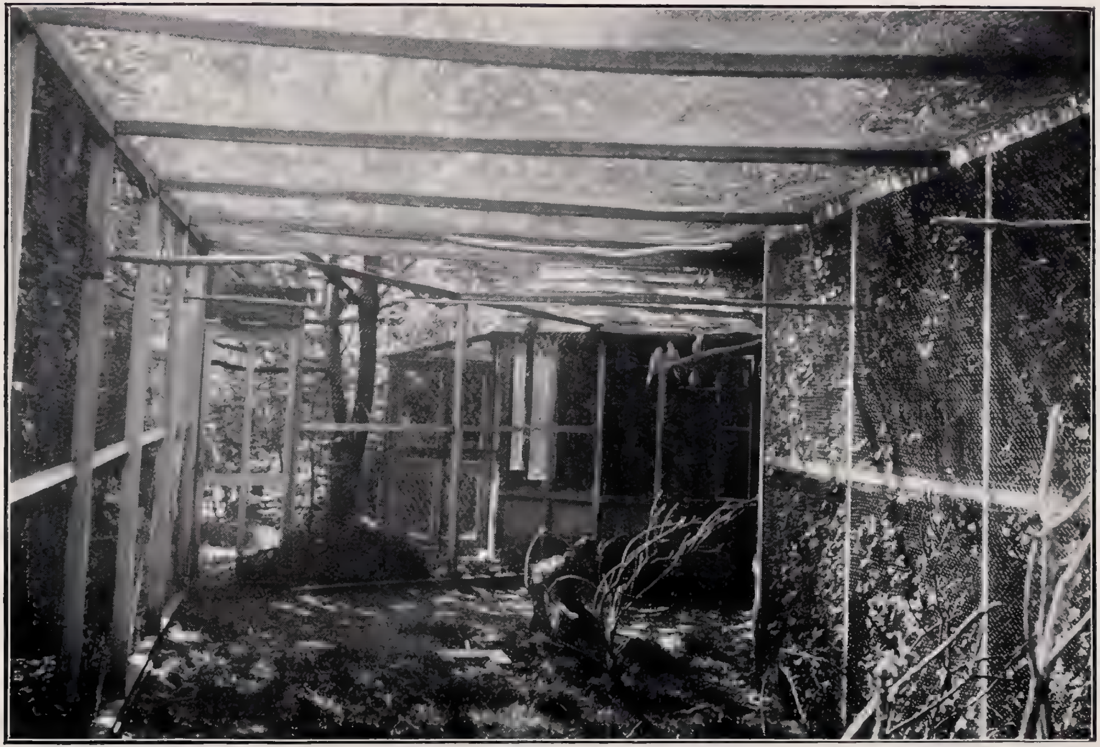
We only regretted having to bring our visit so quickly to an end—our time, both indoors and out was most interesting, our hostess, being very keen on her birds, made our intercourse most entertaining and regretfully we took our leave.

The descent to Minehead was even more adventurous than the climb up, one sharp precipitous turn being only manipulated with difficulty. In Minehead we found most excellent accommodation at the Wellington Hotel, "run" by Mr. H. Westacott (M.F.B.C.), and after dinner had a most pleasant interchange of experiences, with him, though owing to structural alterations his aviaries and birds were a thing of the past, save a few Parrots in cages; he hopes, once the alterations are complete, to find aviary accommodation again. A Bare-eyed Cockatoo, Blue-fronted Amazon, Grey Parrot and a pair of Diamond Doves (great pets) comprised all the birds he had at present. Most of his collection had passed to a lady residing near by, to whom we paid a flying visit the next morning and saw an interesting series of *Fringillidae* and *Ploceidae,* also many Budgerigars and Lovebirds.

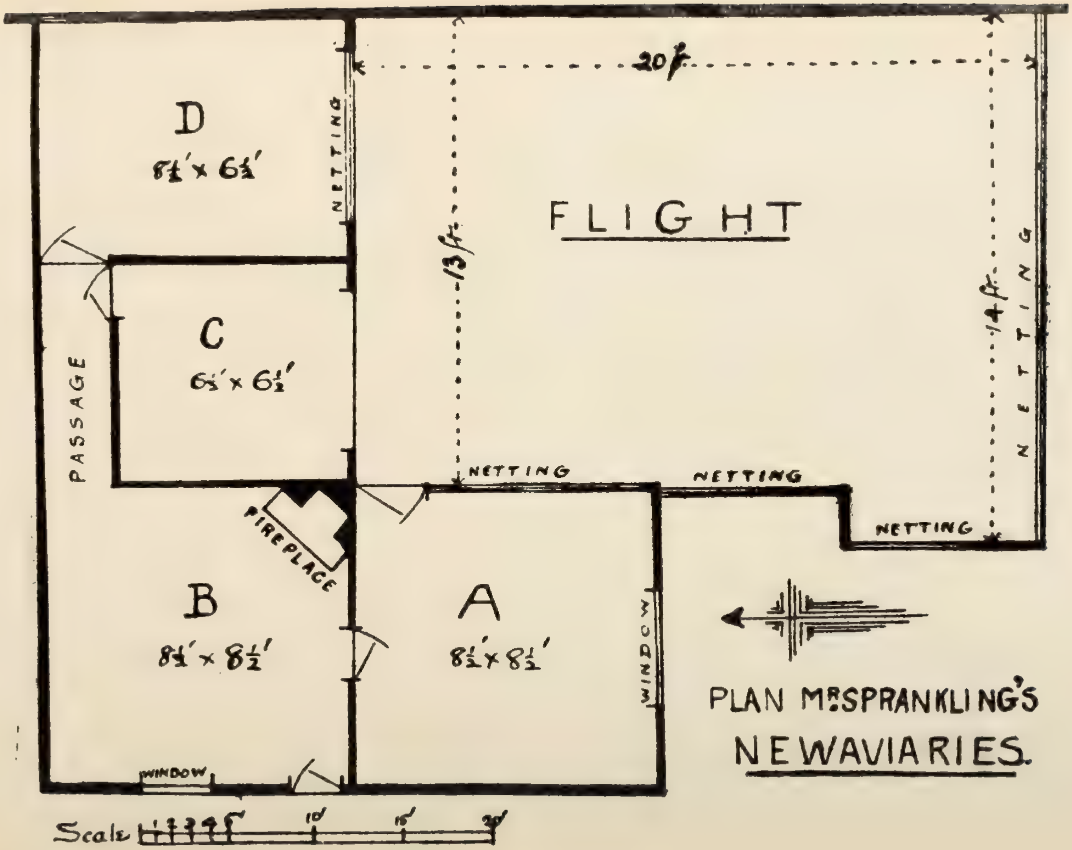
Our tour was now nearing its end, having only two more days to run. In good time we set out for Taunton, our objective being Mr. Sprankling's, whom we had some little difficulty in finding.

MR. SPRANKLING'S AVIARIES: After having refreshed ourselves with the lunch kindly provided for us we adjourned to the garden, and began our inspection of the main object of our visit—aviaries and birds. The Aviaries consist of two groups which Mr. Sprankling calls the "Old Lean-to Aviary," and the "New Aviary"; the latter he contemplates enlarging. Both series have brick shelters and every care has been taken to provide the birds with adequate shelter and breeding results have been quite up to the average.

Old Lean-to Aviary: This aviary, so far as my memory serves me, has no open flight; consisting of a range some 18ft. long by 6ft., and about 6ft. high, with wire netting fronts and divided into three sections, each about 6ft. square.



La Baronne le Clement de Taintegneis' Large Aviary *Photo by A. Vowles.*



PLAN M^R. SPRANKLING'S NEW AVIARIES.

FLIGHT
20 ft.
13 ft.
14 ft.
NETTING
NETTING
NETTING
NETTING
NETTING
D
8½' x 6½'
C
6½' x 6½'
B
8½' x 8½'
A
8½' x 8½'
PASSAGE
FIREPLACE
WINDOW
WINDOW
Scale 1 2 3 4 5' 10' 15' 20'

Though small they were well arranged and their occupants in excellent feather condition.

The first division contained Green, and Yellow Budgerigars, a pair of Madagascar Lovebirds, a Black-cheeked Lovebird, and two Grey Java Sparrows.

The communicating door was open between the other two divisions, and here we noted: Barbary Dove (♀), pair English Turtle Doves (one aviary bred), and several hybrids from the above species and the White Java Dove (these hybrids have been carried to two generations), a wild Ring Dove, an Australian Crested Pigeon, and a pair of Indian Green-winged Doves. Mr. Sprankling having already written about the hybrid Doves in "Bird Notes," it only remains for me to add, that the birds appeared contented and happy, and were very fit.

The New Aviary: This is really a well arranged series with a very nice naturally planted wilderness flight some 20ft. long, by 12ft. wide, extending to 14ft. at the front--*see plan.*

A. -This division is 8½ft. square, and is used for winter quarters, for certain species. It contained a pair of Black-headed Gouldian Finches, an odd cock dittto, a Masked Grassfinch, an Emerald Spotted Dove, and two aviary-bred Bullfinches; all in perfect trim.

B. -This is a sort of combined workshop, kitchen, and store with a fireplace in one corner, and is the same size as "A." It forms a most useful adjunct to the aviary.

C. This is the main division and forms a really fine aviary, as a glance at the plan will indicate. It is very tastefully planted, and contains an abundance of natural cover, every point of advantage being clothed with various creepers, Privet and various evergreens, with grass and herbage, and a good sized cement bath, practically and picturesquely cover the ground area of the flight. It contained the following species:—

I pair Long-tailed Grassfinches (*Poephila acuticauda*)—incubating.
1 pair Rufous-tailed Grassfinches (*Bathilda ruficauda*)—incubating.
1 pair Diamond Finches (*Steganopleura guttata*).
2 pairs Zebra Finches (*Taeniopygia castanotis*)—one pair feeding young, the other incubating.

5 Goldfinches (*Carduelis elegans*)—four of which are aviary bred, two pairs incubating.
1 pair Common Avadavats (*Sporaeginthus amandava*).

D. Is a separate enclosure, 8½ft. by 6ft., the whole of which is covered by a roof, with a wire-netting front looking into the flight "C." It is a most useful adjunct of the main aviary (C), either as winter quarters for birds requiring partial protection, or as a flight for young birds, or for pugnacious pairs calling for separate accommodation. It contained:—

3 Long-tailed Grassfinches (aviary bred).
1 Zebra Finch (♂), 1 Goldfinch (♀)—aviary bred.
1 Greenfinch (♂), 1 Linnet (♀).
1 Bullfinch (♂)—father of the two hens in Division A.
3 Canaries.

The New Aviary and its adjuncts, is really practical, effective, and very pleasing in appearance, with attendance details reduced to a minimum in fact is self-contained, consisting as it does of: store, kitchen and workroom combined, two indoor enclosures, and the main aviary, and it should certainly give good results, fully commensurate with its accommodation capacity.

After spending a very pleasant couple of hours with our host and hostess, we set out for Westbury, to visit our fellow member, Mr. Wm. Shore Baily, the account of which and also the final run home to Oxford, I must leave to the next instalment.

I will insert here a small paragraph (*request*) which I shall repeat next month, viz.: that if those members whose aviaries and birds have been referred to in this account of a most interesting Easter Tour, will send in notes of the season's doings in the said aviaries, also supplying the many omissions I have been guilty of re details, it would form a most practical and instructive sequel to this lengthy account of an enjoyable tour.

(*To be concluded*).

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Sir William Ingram's Birds of Paradise at Little Tobago.

PER O. MILLSUM.

INTRODUCTORY REMARKS: I am quite sure many members will be delighted to have the opportunity of reading an article, reprinted from *The Port of Spain Gazette* of August 2nd, 1914, and daily observations and reports of the Paradise birds at Little Tobago. Sir William Ingram, whose summer residence at Westgate-on-Sea is so close to my present address, knowing my passionate interest in bird life, and actual experience with a number of Birds of Paradise, nine species comprising some 25 to 30 specimens, formerly in the Everberg collection, very kindly allowed me to read the report in the newspaper named above, and at my earnestly expressed desire to be allowed to pass it on to other interested members of our society, gave me his permission to do so. Methinks there are some of us aviculturists who in many ways envy Sir William's—"Robinson Crusoe"—a title, I believe, his man Mr. Robert Herold prefers. Truly Bobs leads an admirable, if somewhat lonely life. Surrounded by Nature in some of its most beautiful forms, freed from the anxieties of war in all its details and also very many of the cares that form part of one's private and daily life. Bobs is spared many of these. Without unduly digressing, I may perhaps remark that the present times have a great significance to me, as over the once calm peaceful village, in which were situated Monsieur R. Pauvvels' aviaries, and in which I lived, while getting together and supervising the collection of rare living birds, which once occupied the Everberg aviaries, the tumult of war has rolled. This, then peaceful, smiling country must now be little more than a desolate wilderness, and one can now be thankful that circumstances compelled the disbanding of the collection less than two years ago and my return to England, otherwise the birds and my Belgian home must have been involved in one common ruin—*en passant*, I must express my respectful admiration of the people I once lived among, and the noble and heroic part they are playing in the great European struggle. I have said that Bobs, living his own peaceful, and shall I say, simple life, is spared many of our cares, but there can be no doubt whatever that there are moments, nay days of solitude when all is not honey, when silence becomes boredom, but let us look at and imagine the brighter moments, and picture him walking throughout the tropical glades of Little Tobago, deeply immersed in events of Nature that can never cross our paths. At such times Bobs has the advantage of studying the characteristics of Paradise Birds and other native fauna in their natural haunts. I say natural for the Paradise birds: because by now, though aliens to that particular part of the tropical globe, they are surely becoming naturalised. Sir William Ingram tells me his man reports having observed six males, ten females and one young bird. Accepting Bobs' observations as correct, and by all accounts he is a most observant and trustworthy student of ornithology, I think, as a body of foreign bird-lovers, we are deeply grateful to Sir

William for his enthusiastic spirit and far-seeing action in safeguarding for future generations, maybe, a genus of birds likely at some period to be decimated by the plumage hunter. We cannot tell, but it is quite a reasonable possibility, that aviculturists of another generation will have reason to remember Sir William Ingram's wise, if somewhat costly determination to carry out an idea, a hobby, or by any other appellation one desires to call a purpose carried through. I have kept Paradise birds, I fear the time is past for me to hope to have their likes again, but I shall never forget the beautiful sight of seeing, such as; *Paradisea minor, apoda*, and *raggiana*, displaying in their respective aviaries with the sun playing on their lovely plumes. The display is charming enough, but the added beauty of sunlight on their exquisite and delicately shaded garments is past the power of my pen to describe. Thus I make no excuse for envying Bobs in his daily round of watchfulness, and may he be long spared to see the continuance of the progressive results already attained. O. MILLSUM.

LITTLE TOBAGO.

The Adopted Island Home of the Birds of Paradise

"Getting over to this island from the bay just below Mr. H. H. Tucker's house at Spey Side, which is situated on the larger island of Tobago, is not exactly such an easy task as is walking across the Savannah at Port of Spain; for instance, if the sea happens to be choppy, and rolling under the influence of a ground swell, as was the case when two of us were permitted to visit there on July 21st, 1914. Between Tobago itself and Little Tobago lies a mass of rocky formation known as Goat Island, and it was while hugging the shore of this and passing round the northern end that our boat became nothing more than a mere plaything—a battledore and shuttlecock—in the midst of the angry, merciless waves, for we were, during an interval of ten or more minutes, helplessly tossed and thrown about with now and again a douche of sea water finding its way right upon us and into the boat. It was then that, thoughts were deep and silent as to momentarily possible results, notwithstanding that we were in as trongly built four-oared boat, manned by four sturdy oarsmen, and the captain of the crew, at the helm, who was in charge, and had control of the rudder. However, "all's well that ends well," and so it was with us, as we were subsequently amply rewarded by landing in Little Tobago something under an hour's pull from the start. Once ashore we were met by Sir William Ingram's caretaker, who turned out to be a versatile, kindly hearted and a most interesting entertainer, in the person of Mr. Bob Herold, native of Zurich, in Switzerland, or, as he desires to be called, "Robinson Crusoe." All that could be desired with atmospheric influences we had in breezy, sunny weather The attraction which prompted us to arrange to go to Bobs' "Paradise Island," was to see, if possible, some of the Birds of Paradise, which the owner of the island, Sir William Ingram, had placed thereon, direct from their native haunts away in far off New Guinea, and in this respect we were successful for a little while before returning back again to Tobago two of these priceless creatures flew across and in front of Bobs' house and right away over a wide, deep valley, which borders on the shore while we sat watching for them. What a thrill of joy ran through one's whole make-up at this sight. Shortly after these had passed out of sight another followed in the same direction. Their flight was deliberate and proved to one that three of them were hale, hearty and strong after a residence of five years, as we understand that it is now about that time since Sir William sent the batch to this, their new West Indian home. Not one, however, was heard or another seen. Bob says they are very, very shy, but impervious, or indifferent to sound, because when he had shot a Hawk, or a Yellow-tail bird, for instance, which may have been close to a Bird of Paradise, the latter has not made way out of sight or been disturbed, through the report of the gun, and only flew away when they saw him. On Bobs' testimony, it might be as well to say in the interest of ornithology, that these valued birds are as carnivorous in their habits as has been proved to be the case with the Yellow-tail (Cassique) Little Tobago is of considerable size and supports a wild vegetation of herbs, shrubs, and trees, among which are numbers common to Tobago, as is also, it might be remarked, the case with wild birds of which quantities of many kinds were seen. Before one forgets to do so, let us record at once that the only company this modern Robinson Crusoe had, were a donkey in prime condition, and a dog. Concrete-made water vessels were seen in various shaded parts, which had been placed for the use of the Birds of Paradise, but as Bobs said, the wild ones obtain the biggest share for they are always going to these troughs to get a drink. For food the paw paw plant has been established, as the imported birds are very fond of the fruit; and so too again, are the native ones. Roughly, for the information of those who do not know them, one might compare in size this particular species of Paradise bird with the European Jay or of the Yellow-tail of these parts. In colour they are brown, so far as we could judge from the three individuals referred to herein, and in flight they passed through the air in an undulating manner, something like that assumed by our Oats-Bird. It takes seven years, it appears, before the plumage is fully developed. Then how long does a Bird of Paradise last before the normal time arrives for it to die? In a lesser way, Little Tobago, is famous for the wild fowl—those which have descended from the original, domesticated fowls that were taken there in the first instance by a former owner or occupant of the island. It was our pleasure to see one of the wild hens, and to hear some of her chickens crying with alarm but all the same hidden away out of sight among the growths.

(*To be continued*).

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Correspondence.

REARING BLACK-CHEEKED LOVEBIRDS BY HAND.

Sir,—It may be of interest if I state that I have hand-reared three more Black-cheeked Lovebirds, making eight in all this summer.

I really find it quite easy now; it is just the first day that care is wanted, as after this they soon learn to take the food themselves from the dish.

Osborne biscuits, "Uveco," crushed wheat, and bread and milk, enable one to supply a varied diet, and they thrive well upon it. Millet seed they take to at once. as soon as they are old enough to crack it.

One lot had a ride through Yorkshire in an open Motor-car when war was declared, and had to be fed during the journey—they really were a bit frightened.

Wakefield, 20/9/'14 (Mrs.) ELEANOR CARTWRIGHT.

SUCCESSFUL REARING OF COMBASOU, ETC.

Sir,—I am pleased to report the successful rearing of a young Combasou in my aviary this year, by a pair of Cordon Bleus. I should be much obliged if you will let me know if it has been reared in England previously.

The hens of the respective pairs (Combasous and Cordon Bleus), each laid eggs in the same nest, the Combasou three, and the Cordon Bleu four.

The Cordon Bleus alone incubated, in fact the Combasous took no interest in the nest whatever after the hen had deposited her eggs therein: neither did they later attempt to feed or brood the young bird.

Of the seven eggs only three hatched out, one Combasou and two Cordon Bleus, but the latter were not fed; the young Combasou, however, did well and is now fending for itself.

The parent birds were supplied with mealworms, greenfood, the ordinary seeds and millet sprays.

The young bird was about a fortnight old when it left the nest, but I have no dates. When first hatched its beak was black with white beads at the corners. It very much resembles the hen (Combasou), but the breast is darker and it is a little smaller. I am afraid it is a hen, as although it has been out of the nest fully three weeks, it has so far showed no signs of coming into colour [even if a cock it is very doubtful if it would come into colour this year. . . . It is a great pity members do not keep proper records of such episodes, as without dates, etc., even most interesting episodes have little value.—ED.].

Other Results:—

Parson Finches hatched out but did not rear.

Zebra Finches hatched out several broods, but went to nest again before they had time to rear.

Cordon Bleus had three broods, but only fully reared the young Combasou. I think some of my failures were due to being unable to get live ants' eggs when they were required.

Bideford, 22/9/14. (Mrs.) MARY BOYD.

THE HOMING INSTINCT.

Sir,—It may be of interest if I record what interested me greatly.

Some months ago I gave a pair of Grey Java Sparrows to a friend in North Wales and shortly afterwards received a letter acknowledging safe arrival, but stating that one escaped almost immediately.

Recently I have heard that it came back into the garden and was caught after being at liberty nearly five months. It was looking quite trim and plump, having apparently fared well on the wild seeds, etc., it had been able to pick up.

Armly, Leeds, 16/1/'14. R. E. SIMPSON.

MOTHS AT IVY BLOSSOM.

Sir,—Those of your readers who are not entomologists may be glad to know that at this time of year, mid-October, a plentiful supply of thick-bodied moths may be found soon after dark sitting on ivy bloom, imbibing the nectar which it contains. There are many sorts of cultivated ivy—I have a small variegated kind, which flowers at the end of August, but the common green large-leaved sort (*Hedera helix*), which is in flower more or less from late September till mid-November, is especially attractive to Lepidopterous insects, which, after they have settled on the flowers for a short time, feel so "comfortable" that they may easily be taken with the fingers and transferred to a box. Among the sorts that occur, four may be found most commonly, as the caterpillars of the three first feed on oak, and those of the last on hawthorn, so that they abound almost everywhere. These four are The Chestnut (*Conistra vaccinii*), The Dark Chestnut (*Conistra ligula*), the Satellite (*Eupsilia satellitia*), and the Green-brindled Crescent (*Meganephria oxayacanthae*). Insectivorous birds greatly appreciate these delicacies, which may be found up till the middle of November.

G. H. RAYNOR.

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Birds of the Jhelum District and an Ornithological Diary from the Punjab.

By H. Whistler, I.P., M.B.O.U.

JULY.

July 2.—Noted a Common Mynah (*Acridotheres tristis*) which had its head and neck plucked completely bare; neither its spirits or its health, however, seemed at all affected.

July 3.—Four newly hatched young in the nest of a King Crow (*Dicrurus ater*) by my house. The first young bird left the nest on the 20th, being followed next day by the others.
A pair of Red-headed Merlins (*Æsalon chicquera*) noted
Pied Crested Cuckoo (*Coccystes jacobinus*) heard calling.

July 4.—Three fresh eggs in a nest of the Large Grey Babbler (*Argya malcolmi*) built about ten feet from the ground in a bough of a small Shisham tree by my house. The nest was a slight but well made structure consisting of a neat cup of fine roots and a few horse hairs, placed in an outer covering of thorny twigs, the latter being necessarily rather straggling but well interlaced. Its internal measurements were diameter $3\frac{1}{4}$ inches, and depth $2\frac{1}{4}$ inches.

A pair of Pied Crested Cuckoos seen; also a single Rufous-tailed Finch-lark (*Ammomanes phoenicura*).

The Common House Crow (*Corvus splendens*) is now nesting.

July 5.—Very heavy rain during the morning. There are at present quite a fair number of Pied Crested Cuckoos (*Coccystes jacobinus*) about and their curious call, which might be considered a feeble edition of the Koel's scream, is to be heard now and again. The species remained throughout the month.

I flushed several Quail from the Jowar crops in the evening, and shooting one found that I had secured a hen Black-breasted or Rain Quail (*Coturnix coromandelica*). I heard also of others being seen so they have not belied their name and reputation; they were not about last month.

Searching for Wren-Warblers' nests I found many small balls of grass with an entrance hole near the top at one side, and well lined with silk from the seed-pods of the "Uck" plant. These were placed in clumps of thorn, generally only a few inches above the ground; all were empty except one, which contained 4 eggs, evidently of the Rufous-fronted Wren-Warbler (*Franklinia buchanani*).

A small colony of Weaver birds (*Ploceus baya*) noted building in a Kikur tree. They were cutting fine strips of grass from some clumps of long "sarpat" grass growing near by; these they carried up into the tree and wove into the structures with a fine indifference to my presence. It was interesting to observe the stages of construction as shown by different nests in the colony. First, a tassel of grass is suspended from a twig; then it is increased and developed into a loop, which is broadened, and a porch is developed over the upper part; the porch is widened and increased until a big oval structure is formed, having a large round hole in the bottom and another at one side. The bottom hole is finally closed in and the side hole fashioned off into a long funnel which hangs below the completed nest.

July 6.—Visited some patches of coarse rushy-grass growing amongst thorn bushes, where a number of pairs of Rufous Fantail-Warblers (*Cisticola cursitans*) were breeding, but I only managed to find one nest: this was unfinished and was placed about a foot from the ground, in a thick patch of grass growing round a scrubby little thorn bush. These curious little Warblers are remarkable for the manner in which they soar in the air, making strange darts and turns in every direction, and uttering all the time a curious chirping song. I also found an unfinished nest of *Prinia inornata*, and a nest with one egg apparently of *Franklinia buchanani*. This nest, however, differed from that of yesterday's in that it was lined with fine grass instead of with silky down.

A nest of the Madras Red-vented Bulbul (*Molpastes haemorrhous*), with three eggs found in a thorn tree by the roadside. Four eggs in a nest of the Common Babbler (*Argya caudata*) placed about 3 feet from the ground in a thorn bush. Several colonies of *Ploceus baya* found building.

Some Pied Crested Cuckoos and 2 Rufous-backed Shrikes (*Lanius erythronotus*) noted. A single Quail (*C. coromandelica*) flushed.

July 7.—Several Finch-Larks (*Ammomanes phoenicura*) noted flying over high in the morning.

Went by train from Hissar to Hansi; noted several Black, and White Ibis from the train.

Then rode from Hansi to Narnaund along the canal bank, noting an adult Brahminy Kite (*Haliastur indus*), 2 Green Sandpipers (*Totanus ochropus*), a pair of *Pratincola caprata* and several small Minivets (*Pericrocotus peregrinus*). Pea-fowl numerous all the way. I noted a Babbler (*Argya malcolini*) with the first few primaries in each wing white; it was about the same place next day.

July 8.—At Narnaund in the early morning I saw for the first time a pair of that curious species the Nukta or Comb-duck (*Sarcidiornis melanotus*)—a species as large as a goose, the male bearing a curious growth at the base of the upper mandible. They were flying over the rest-house compound, when they separated; the male continued on his way, while the female settled on a lofty bough at the top of a dying tree, where she sat and reflected for some time before flying away again.

This same tree was much frequented by a Grey Hornbill (*Lophoceros birostris*), which I saw visiting a hole in the trunk from which he extracted some objects that he ate with great satisfaction. From the excitement of a pair of Mynahs, who strongly objected to the proceeding, it appears probable that the titbits were the Mynah's eggs or young.

Rode in from Narnaund to Hansi, along the canal banks, where I found a White-necked Stork (*Dissura episcopus*) sitting on a large untidy stick nest placed in a side bough of a large Shisham. The bird sat close and when disturbed kept on flying round, returning as soon as I left the tree; from the clucking noise, when the bird moved it was evident that the nest contained young. However I sent a man up to examine and secured 3 very stained and addled eggs with a nestling. The latter was apparently about a week old, so I kept it with a view to rearing it if possible. It was clothed in half-grown down, white and sooty in colour, the distribution of the colours following those of the adult very closely; the crown, however, instead of true down was covered with feathers of a somewhat degenerate type.

A large Bee-eater or two, perhaps *Merops philippinus*, a female *Pratincola caprata*, and some Pied Crested Cuckoos seen; also two or three Sandpipers (*Totanus ochropus*), and a Painted Stork (*Pseudotantalus leucocephalus*).

Reached Hissar in the evening, where I saw some parties of Rose-coloured Pastors and some Rain-Quail. A Nightjar (sp. ?) flushed, was the first I have seen in this district.

July 9.—Great numbers of Doves (*Turtur risorius*) flying high in flocks in the evening. Also many flocks of Yellow-throated Sparrows (*Gymnorhis flavicollis*) noted flying over, all following the same line of flight—roughly west to east.

A few Rain-Quail about. Two pairs of White Ibis, a pair of Pied Mynahs, and a Green Sandpiper noted.

The Rufous-backed Shrikes (noted on the 6th July) are still in the same place.

July 10.—Went by train to Hansi, noting from the carriage a small party of Coursers (*Cursorius*, sp. ?) on some rough ground. Also a White-necked Stork.

From Hansi to Bhiwani.

July 12.—At Bhiwani I saw that a pair of Red-headed Merlins (*Æsalon chicquera*) were haunting the trees in front of the rest-house. They had been in the same place when I was there before in May.

July 13.—Returned to Hissar. A pair of Syke's Striated Swallows (*Hirundo erythropygia*) were noted by one of the stations, where they evidently had a nest.

July 14.—Two eggs found in the nest of the Indian Robin (*Thamnobia cambaiensis*) placed in one of the barholes in my stable.. The same nest had been found on 11th June to contain eggs which had afterwards disappeared.

A Rufous-backed Shrike (*Lanius erythronotus*) seen.

July 16.—Examined a couple of nests of the Pond Heron (*Ardeola grayi*) built in some kikur trees by my house. They were found to contain four eggs and young respectively.

July 18.—Went to examine the nest of the Rufous Fantail-Warbler found in course of construction on 6th July. It was now deserted and contained a few broken egg-shells, which were being devoured by a swarm of tiny red ants; ants appear to play a great part in the destruction of eggs in this district, and it is a common sight to see an old nest cased in the mud galleries of a colony of white ants, who are busy consuming the materials of which it is made!

A small party of Pipits seen appeared to be attributable to (*Anthus striolatus*). A nest with 5 eggs of the Large Grey Babbler (*Argya malcolmi*) found about 8 feet from the ground in a small Kikur tree; the nest was a slight but very strong platform of interlaced thorny twigs, with a shallow cup, slightly lined with fine roots.

July 19.—Examined several nests of the Pond Heron (*Ardeola grayi*) which were placed at a great height from the ground at the tops of a Peepul and a Mango tree by a small pond. The nests were the usual slight stick structures and mostly contained 4 eggs apiece.

Four fresh eggs in a nest of the Jungle Babbler (*Crateropus canorus*) placed about 12 feet from the ground at the end of a bough of a Guava tree.

A small party of Rose-coloured Pastors (*Pastor roseus*) seen in the evening and a few reported as seen in the morning.

The two pairs of *Indian Coursers* (*Cursorius coromandelicus*) are still frequenting the paddock where they were first noted weeks ago; but so far I can find no eggs or young.

Five White Ibis, and one Black Ibis seen. Some Night Herons calling by the bungalow in the evening.

July 20.—A rainy day. I was much surprised to see three Wagtails feeding in the compound. These were evidently two Masked Wagtails (*Motacilla personata*) accompanied by a duller bird that looked like an immature White Wagtail (*M. alba*).

Examined a colony of some fifteen nests of the Common Weaver or Blyth's Baya (*Ploceus baya*) swung in amongst the upper branches of a small but very dense Kikur-tree. Several of the nests were still unfinished, while others contained eggs or young. The nests were all of the same material—fine strips cut from the long blades of spear grass that grows in tufts along the neighbouring canal.

In a Peepul near by was a nest of the Pied Mynah (*Sturnopastor contra*)—a large untidy domed mass of grass and feathers placed in a fork about 20 feet from the ground. On examination this proved to contain an addled egg and three well feathered youngsters, who flew out and dispersed in a field of sugar cane. I caught two of these, to the great alarm of the parent bird, who hovered round and scolded me vigorously, and took them home to rear, as this species makes a delightful cage bird.

Several Rain Quail (*Coturnix coromandelica*) flushed in some sugar cane.

July 21.—Driving round the cattle farm I noticed a curious black and white bird sitting out in the middle of a wide stretch of fields. From its attitude it looked like a small Cormorant or Duck (I had no glasses with me) and once it jumped up into the air whirling its wings like a wounded Teal trying in vain to fly. I proceeded to investigate, and again saw the curious jump performed, but as I approached it disappeared from view as if squatting; however, it must have run as it rose eventually some distance from where it had been first seen, and a lucky long shot from my companion's gun brought it low. Even then I was under the impression that we had secured some curious kind of Duck, and hence was much surprised to pick up a beautiful male Lesser Floriken or Likh Bustard (*Sypheotis aurita*). The species is very rare here, but one was seen (I am told) about the same place in August, 1912. Its range proper appears to begin about at Delhi, a hundred miles south of this.

Several Rain Quail (*Coturnix coromandelica*) about. A Small Button-Quail (*Turnix dussumieri*) proved to be a nesting bird.

A single adult Rose-coloured Pastor (*Pastor roseus*) noted feeding with some Mynahs; a flock of about a dozen also seen. Several White Ibis and a White-necked Stork. Pied-crested Cuckoos (*Coccystes jacobinus*) have been very noticeable to-day.

July 22.—There are numbers of Egrets breeding in the Jail garden at present, in some very lofty Peepul trees, the nests being mostly situated at the tops of the very highest boughs. The Cattle Egret (*Bubulcus coromandus*) is the most numerous species, but there are a few Little Egrets (*Herodias garzetta*), and I also noticed one or two Night Herons (*Nycticorax griseus*) which may have owned some of the nests. The Pond Herons (*Ardeola grayi*) for the most part nest in a clump of small Kikur and Shisham trees situated round a pond. I sent a man up to examine some of the nests and he reported about an equal number of nests with young and with hard-set eggs almost ready to hatch.

A very large number of Blue-cheeked Bee-eaters (*Merops persicus*) noted sitting about on some telegraph wires at dusk, in the same place where I saw numbers in May, although they seemed to disappear in the interim. All birds seen appeared to be adults.

A few Rain Quail heard and seen. A single Rufous-tailed Finch-Lark (*Ammomanes phœnicura*) noted; also what was probably an Ashy-crowned Finch-Lark (*Pyrrhulauda grisea*).

July 24.—Hearing a lot of excitement in a colony of Weaver birds (*Ploceus baya*), I investigated and found that the cause of their excitement was a Wandering Tree Pie (*Dendrocitta rufa*) which was sitting on a bough of the tree devouring something without paying any heed to the agitation of the Weavers. The something proved to be the corpse of a Weaver—apparently an adult.

A flock of Rose-coloured Pastors seen.

July 26.—Visited a distant patch of fairly thick scrub or grass near a canal bank where a large number of Nightjars had been reported as seen a few days previously. After a short search I fell in with them and found that my informant had not exaggerated. They were almost in "coveys," six or seven getting up often near the same place, and there were often two or three on the wing at one time, darting and gliding amongst the bushes in a most erratic fashion. Each bird as it rose uttered a kind of clicking note. I secured a pair but up till the present have failed to identify the exact species. A very pretty exhibition of flying was given when on one occasion a Nightjar who had risen rather high into the air was chased by a Red-headed Merlin. Needless to say no blood was drawn.

A Black-winged Kite (*Elanus cœruleus*) and a Cuckoo (*Cuculus canorus*) were noted—the Cuckoo is the first that I have seen here.

July 27.—Six eggs found in a nest of the Rufous Fantail-Warbler (*Cisticola cursitans*), which was a very dainty little structure two inches in breadth slung in the grass at the base of a bush, about six inches from the ground. The method of building appears to be first to weave a light hammock of cotton-like fibres in the shape of a long deep bag between the grass stems, the mouth of the bag being at the top; a thick wad of small fragments of dry grass is then placed in the bottom of the bag to stiffen it, and over this is plastered by way of lining a soft felt down—the whole forming a delicate but beautiful structure.

A few Rose-coloured Pastors seen.

July 28.—Found many nests of the Rufous-fronted Wren-Warbler (*Franklinia buchanani*. This curious little bird in these parts chiefly builds in wild caper bushes—curious tangles of thorny leafless stems, which grow in compact masses close to the ground. Wherever there is a patch of waste ground dotted with clumps of wild olive, there may the Wren-Warbler be expected, several nests being built in one such patch. The nest is always placed low, at a height of from one to three feet from the ground. Another but less common site is the tangle formed when a heap of thorny branches has been cut down and left to rot on the ground, half covered by luxuriant grass.

A typical nest with five fresh eggs taken to-day may be described as follows: a regular oval of slight but firm construction, with the entrance near the top of one side; composed of dry fragments and stems of grass, and Khus, mixed with a little cotton-like Downy-thread, the bottom of the nest being more thickly lined with the same: The height of the nest is about 3¾ inches, the greatest breadth 2 and five-sixths inches. Slight variations on this type are found, chiefly a matter of shape, position of the entrance hole, and degree of thickness of the lining.

Of the nests found to-day, one was half-built, one contained 5 eggs, one contained broken eggs, one contained naked young, and several were empty.

Many Sykes' Tree-Warblers (*Hypolais rama*) have arrived on migration. Several Ashy-Crowned Finch-Larks (*Pyrrhulauda grisea*) noted singly and in parties—these are, I think also new arrivals.

To be continued.

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Recent Arrivals of Birds of Paradise, etc.

Our member, Mr. W. J. C. Frost, who has been collecting in Aru Islands, New Guinea, etc., for the London Zoo and other clients, has succeeded in collecting and safely landing a choice collection of interesting, rare and uncommon species, many of which are to be seen in the cages and aviaries of the London Zoo, among which are the following:—

From the Aru Islands: 18 Greater and 22 King Birds of Paradise; 3 Violet and 1 Black Manucodes; 3 Duperry's Megapodes; 4 Lilac-fronted, 6 Orange-bellied, 2 Pearl-spotted and 1 Magenta-capped Fruit-Pigeons; 3 Long tailed Brown Doves; 2 Blue-eyed Ravens; 2 Glossy Calornis; 4 Honeyeaters; 1 Pitta (*Novæ guineæ*); 6 Crimson-fronted Lories; 2 Red-sided Eclectus; 1 Yellow-bellied Ground Pigeon, and 15 Dumont's Grackles.

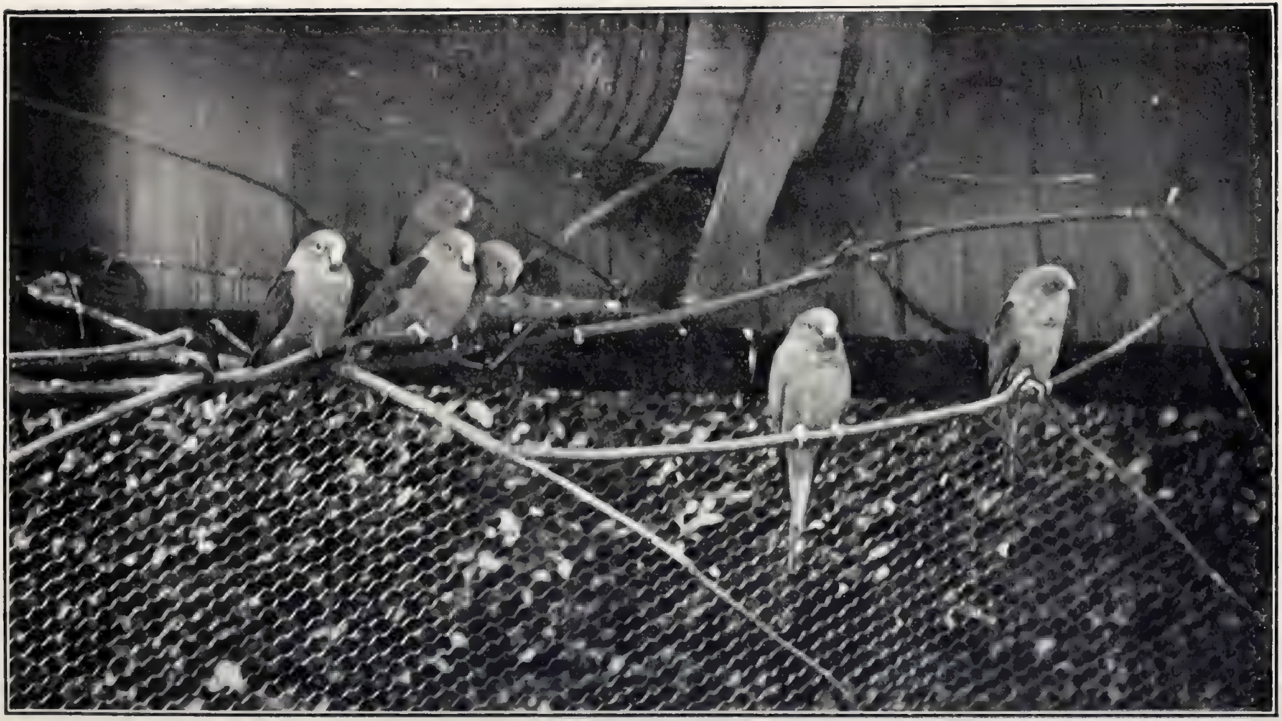
From N.W. New Guinea: 2 Lesser Birds of Paradise, 2 Forsten's Lorikeets, and 1 Black Lory.

From S.W. New Guinea: 2 Pied Egrets.

From Tenimber Islands: 2 Blue-tailed Fruit-Pigeons, and 4 Blue-streaked Lories.

From Ceram: 2 Purple-capped Lories.

From Java: 3 Fairy Blue-Birds, 2 Ruby-throated Bulbuls, 2 Black-breasted Button Quail, and 1 Red Dove.



A Family Group of All-Green Parrakeets (*Brotogerys tirica*). *Photo by E. O. Page.*

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BIRD NOTES:

— THE —

JOURNAL OF THE FOREIGN BIRD CLUB

The Breeding of All-Green Parrakeets *(Brotogerys tirica)* and Cactus Conures *(Conurus cactorum).*

BY DR. L. LOVELL-KEAYS, F.Z.S.

As far as I am aware this beautiful, if somewhat homogeneously coloured Parrakeet, has not previously been bred in captivity in Great Britain, and I am therefore giving a short account of the event. My experience is that Parrakeets are easy to breed, and do not appear to mind overcrowding, or the presence of near relatives nearly as much as is popularly supposed. But Parrakeets are all spiteful, most of them wickedly so, and yet people will tell you they have kept a pair of Rosellas with Finches and other small birds. But the more you deal with Parrakeets the less you learn to trust them. I have even happened on a spitefully inclined Cockatiel, the Parrakeet that most people would dub harmless and inoffensive. If I may be forgiven for digressing I may say that in a very mixed series I have found Black-cheeked Lovebirds absolutely harmless and inoffensive. All the same I would not trust a strange Blackcheek any more than I would any other Parrakeet. If one can get a large-sized Parrakeet that won't stand being bullied, and yet is not a bad bully itself, it is a good plan to have one in a mixed series to act as a policeman. In a Weavers' aviary I have all sorts of bullies yet the number of disasters has been very small. But we are forgetting our All-Green Parrakeets. I bought this pair from Mr. Jamrach this spring and picked them out myself. Out of about eight or nine I only saw one certain hen, and unfortunately her wings were clipped. However, I turned them out into my new Parrakeet aviary with a good shelter and fair flight. They soon settled down and in about a fortnight's time made full use of a nesting barrel in the most out of the way corner of the inner flight, absolutely inaccessible, so that exact details were quite an impossibility. By careful observation I am enabled to fix the date of nesting on or near the 1st of June. There were four eggs, which all proved to be fertile; the colour was white, and in shape something between an oval and a round, and in size about that of a Thrush's, only rounder. The period of incubation is about 26 days, but the hen hardly ever left the nest, the cock bird ministering to her wants, so much so that I feared she must have died. It was not until well into July that the hen was seen at all often and then only for brief intervals. The young when first hatched are the usual naked grotesque lumps of ugliness, with an enormous hooked gape and I strongly suspect that the reason the hen never comes off is that she daren't, lest she should catch a glimpse of them on her return. Parrakeets develop very slowly and it is usually six weeks before they leave the nest. But when one considers their Hawk-like appearance and the spitefulness of other Parrakeets one can see how necessary it is they should be fully equipped for the battle of life. The birds appear to open their eyes at about the 14th day, but as the hen incubates as soon as the first egg is laid, these and other points are difficult to dogmatise on. The nestling plumage is pure green and there is no down such as one gets in Egrets or Owlets. No attempt is made at sanitary cleanliness, but the habitation does not seem to suffer in consequence. Most Parrakeets seem to prefer a roomy barrel and this may be the reason. From August 1st to 13th, I never saw nor heard anything of my All-Greens, and I feared for the worst. Possibly the war so occupied my attention as to cause me to forget them, but on August 14th one young All-Green left the nest. It was the image of its parents, but with a dark brown beak instead of being light coloured. The general shape of the young is rounder and less trim, and of course the feet and legs pinker in colour. The tail is short and almost square, like that of a Tovi, but in six weeks' time all differences disappear, and it is impossible to tell the young from the old, except that the old are more noisy.

A second young bird appeared on the 15th, a third on the 17th, and a fourth on the 19th. All four lived, and are doing well. At first they slept out in a bare oak sapling, but soon learnt to seek cover when cold or too hot. The parent birds made a tremendous clatter when the first young bird left the nest, and it was the clatter that led to its detection.

These notes are quite a brief description of the All-Green Parrakeets, and I do not feel a full description of the Cactus Conures is called for, as so much that is said of the All-Greens applies perfectly well to the Cactus Conures. I purchased the Cactus Conures from our late member Mr. Smith, of Redruth, and I may incidentally remark that I have never had a business transaction with anybody more agreeable than this one. The Cactus Conure is a handsome bird, a beautiful yellowish green above with head and upper portion of breast and neck a purplish brown and a dull yellow abdomen. I purchased them in April, and by May 31st. I found they were incubating. On June 30th I heard active young in the barrel and on August 7-10 three young left the nest. The young closely resembled their parents, but appeared considerably smaller. The difference in size, I think, was more apparent than real. As regards plumage the young resemble in every respect the parents except that they are decidedly lighter in colour as regards the brown and yellowish parts. They, too, are less noisy than their parents. The hen bird is nesting again, and if I mistake not has already hatched out.

The moral of this short description is as follows: In avicultural matters luck is practically speaking the real element of success. Fortune in aviculture is not to be won by wooing. In fact, very often success comes when we least expect it and certainly least deserve it, whereas if we are over careful we fail just when we feel that success is ours. For instance, with Bearded Reedlings but that is another story I have promised our Hon. Editor to write another tragedy some day.

But don't run away with the idea that if you neglect your birds they will succeed. My birds have everything that thought and experience can provide but they have to rub shoulders with all kinds whether they be patrician or plebeian. One more word, and it is this : If your breeding successes have not been great, get some conscientious person who takes *no* interest in birds to feed your birds and go away for a month yourself, in the breeding season of course, then drop a line to the Editor of "B.N."

Parrot-Finches *(Erythrura).*

BY WESLEY T. PAGE, F.Z.S., ETC.

(Continued from page 317).

Of the species figured on our plate, in October issue, four are known to aviculture, all of which, except the Pin-tailed, have been bred in captivity, and which I hope in this and ensuing issues we shall be able to deal with comprehensively.

THE COMMON PARROT-FINCH (*E. psittacea*). Though this charming species has been known to aviculture for a long period, it has always been uncommon and has consequently commanded a high figure. The late Herr August F. Weiner was the first to breed this species, in what we may call the early days of aviculutre in this country and for many years his success stood alone; then some sixteen years ago the species was obtained by other aviculturists and successes followed each other more rapidly, and several aviculturists have bred it quite freely. Dr. M. Amsler gives his experiences with several species in this issue and we hope to give others later.

The following quotations are from back volumes of "B.N." or letters to the Editor.

Mr. W. R. Temple, writing of his aviaries states:

"A large aviary 36 feet x 24 feet x 12 feet, contains 7 "pairs Common Parrot Finches, 2 pairs Ruficaudas, 2 pairs Orange-"breasted Waxbills, 2 pairs Pin-tail Parrot-Finches, and three odd "birds. The result therefrom being 14 young Parrot Finches, fully "reared during 1910."

In "B.N.," March, 1912, page 64, I quote Mr. Temple as follows:

"I started this season with 16 adult Parrot-Finches. One "pair of certain breeders had an aviary to themselves, but at the end "of May I found the hen dead on the nest from a soft egg, she had "been sitting on five eggs for twelve days, each egg contained a young "bird. The other fourteen were in my largest aviary. Three couples "were busily incubating clutches, when they all became ill with some "form of liver complaint, and between June 20 and July 7, eleven of "them died—very disappointing, as nearly every egg of the above clutches "contained a young bird. This disease did not in any way affect the "remainder or any of the other birds in the aviary—Pin-tailed Parrot-"Finches, Green Avadavats, Firefinches, Gold-breasted Waxbills, Cordon "Bleus, etc." These notes refer to 1909.

1911 was a bad season with Mr. Temple, only 7 young of this species being fully reared.

In 1909 our member, the late Mrs. Helen Bromet, had good success with this species, nine young being fully reared from one pair.

Our member, Mr. G. E. Rattigan has had fair success with this species, and his full notes may be read in B.N., February, 1913, page 45.

> "One clutch of eggs took nineteen days to hatch out. The young "were distinctly marked with red some days before they left the nest. "The young were reared on greenfood and seeding grass, together with "a few mealworms, though a certain amount of millet seed appeared to "form part of their bill of fare."

The nest site preferred appears to be a low one, unless the interference of other occupants of the aviary is too pronounced, when a highly placed and secluded box will be chosen. When placed in a bush, the site is almost invariably a low one, and the nest is a domed structure of grass and hay of the usual Grassfinch-type.

The average incubation period is thirteen days, though in one instance, in Mr. Rattigan's aviary, nineteen days were taken to hatch out the eggs.

As to the means to take to secure the best results,, opinion varies considerably, but good results have been obtained under all the undermentioned conditions.

A separate aviary given up to this species.

An aviary given up to this species with the addition of a single pair of some largish species.

As forming part of a mixed crowd of Grassfinches.

One or two pairs forming part of a mixed crowd of hard and soft-bills.

Of course in the above it is premised that overcrowding is not indulged in to any serious extent.

As to artificial nesting sites, a box appears to have been used in the majority of instances, but rush nests, husks, old straw hats (nailed against the wall by the brim and a hole cut in the crown), straw sheaths from bottles, etc., have have all been favoured.

Diet: The following are the "bills of fare" provided by some who have been successful in breeding this species:

1. Easily reared on Canary seed and millet, with liberal supplies of seeding and flowering grass, and chickweed.

2. Millet and Canary seed is the staple food, very fond of insects, and greenfood (seeding grass and chickweed) in summer.

3. Canary and White Millet seed, millet sprays, greenfood, and eight mealworms per pair daily. When feeding young, insectile mixture is supplied and the number of mealworms increased to fourteen per pair daily.

4. The parents had access to milk-sop, insectile mixture, greenfood, mealworms, Canary, millet, and other seeds, also millet sprays—the birds practically partook of all.

NESTLING PLUMAGE: This is apparently rather variable, as is evidenced by the following descriptions of various aviculturists.

1. Dull green above; throat, breast, and belly dingy yellow-brown, beak yellowish; no scarlet visible for the first few weeks.

2. Dingy green; throat and breast dingy yellowish-brown; upper tail coverts and vent dull red.

3. Comparison of two nests by Mr. W. R. Temple in 1908. First nest. three young hatched June 14th, left nest July 5—one young all green, the other two almost as bright as their parents. Second nest: Five young hatched June 25, left nest July 15—were all green.

REMARKS RE YOUNG: Very soon independent of their parents.

Very precocious—Mr. W. R. Temple writes of four young which went to nest when little more than three months old; each couple laid a clutch of eggs, but made no attempt to incubate; some of the eggs were fertile, as two were given to a Gouldian Finch, and both hatched out.

Those young without red on the head, throat, etc., when they leave the nest, usually begin to show same in about six weeks, sooner in some cases.

SEX DISTINCTIONS: Both male and female are very similar and it needs a very keen eye to pick them out. In individual pairs, the male is usually more masculine in demeanour and appearance; also his colours are usually more intense and the scarlet areas a little larger than those of his mate. However, with the variability common to all species, the above distinctions are not of much value when trying to pick out a pair from a crowd. The beak of the female is a trifle more wedge-shaped than that of the male, but it needs a keen eye to detect the difference.

Mr. W. R. Temple adopts, what appears to the writer, a most excellent method, but this really applies to the private aviary rather than to the difficult problem of picking out a pair at a dealer's shop, etc., it was as follows: A trap box was fixed up in the aviary, which had a sliding door released by a string from a distance; in this were placed the seed pans, and if two agree and eat quietly from the same dish they are a pair, the sliding door is released and they are secured and put up for breeding or disposal—if not a pair, one at once chases thé other out.

GENERAL NOTES: This species is a general favourite with all aviculturists, and deservedly so, for its beauty is undeniable, yet the writer confesses he has not kept it, mainly for this reason, they are costly and, when spending pounds on a single pair of birds, his choice has invariably fallen on soft-bills.

The Common Parrot-Finch appears to be fairly hardy once the prostration following importation has been overcome, but it must be noted that they do not stand damp or wet well, neither do they stand change of locality well for in many instances which have come to my notice, established birds which have reared young, and young which have been reared in captivity, have been despatched to other aviaries, and though carefully packed, and not *en route* more than twelve hours, carefully treated on arrival, yet have enjoyed a very brief life indeed in their new quarters. I deduce that aviaries built on clay, or any damp, wet, retentive soil are not suitable winter quarters for this species. Again that all aviaries which house this species, should possess a warm, dry shelter-shed (not necessarily artificially heated), also that there should be a portion of the flight roofed in; extending eaves, unless fully a yard or more wide, are not sufficient. Also that this covered-in portion should be so arranged as not to be wind-swept.

Now, I think, more than enough has been said, especially in view of other papers which are to appear in due course -thus I have not aimed at anything more than a series of broken notes—the other species known to aviculture will be dealt with in next instalment.

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THREE COMMON SPECIES OF PARROT-FINCH.

By Dr. M. Amsler.

The Editor has asked mo to contribute my experiences of the Pin-tail Nonpariel, the Three-coloured Parrot-Finch, and the Common Parrot Finch in captivity.

Although my aviaries have at one time or another contained all these species, Mr. Page would have done better to apply to other aviculturists for notes on these birds -for aught I know he may have done so.

Mr. Seth Smith for instance was at one time eminently successful, and Mr. Temple has bred numbers of Common Parrot Finches and also some of the Three-coloured variety.

As I frequently visit Mr. Temple's aviaries I shall later make several references to my observations there.

Of the Pin-tail Nonpareil (lately re-named Pin-tail Parrot-Finch) I have had more specimens than I care to mention, but have never had any success with them as breeders until this year.

In September of last year I received five pairs from a dealer in exchange of these nine were dead in a week and the tenth is still, at the end of a year, fit and well.

A few weeks later I received six more pairs from the same importation but from a different dealer these with one exception are, as far as I know, alive and well.

My intention was to obtain two or three pairs, but in this I was frustrated, as the vast majority of "hens" always turn out to be immature cocks, and as time went on I found I was possessed of only one hen. I kept the hen and two cocks and disposed of the rest.

I find that the males attain their full colour at the first moult, and I am inclined to think there are two varieties in the males as well as in the females—the latter variation has already been described.

In the males the difference of colour is to be found in the breast and under parts in some the colour being vermilion, while in others it is merely a reddish-orange. This difference is fixed and not due to lack of vigour—as it reappears at successive moults. We have already had a few notes on the delicacy of this bird.

I can adduce no reason, but do not think the numerous deaths are due entirely to crowding, etc., during the voyage, for the same conditions surround many other birds without the same disastrous death-rate. The birds, when first imported, seem to find some difficulty in husking their seed, and if Paddy Rice is really a necessity to them during the first few weeks of acclimatisation, the hardness of the seed might account for their inability to make full use of it.

I have tried the following foods, with results which are not encouraging—Canary, White and Indian Millet of course —Paddy Rice, Oats' and Groats, Mealworms, Gentles, Greenfly, and Flowering Grass. Very little but Paddy Rice and Millet was looked at. I have scalded the spray millet and also the Paddy Rice and found they would not touch it in this condition, whereas newly imported and young waxbills like their Millet so treated. My post mortem examinations do not tally with those reported in the papers.

In most instances there was no visible cause of death; in two there was pericarditis, and in one pneumonia. With regard to breeding operations, I have not much to record, Mr. Temple had a very fine pair for two or three years, which finally built a nest in a square box, with a small circular opening—four or five eggs were laid, they were white like the common Parrot-Finch's. Two young were hatched out, which only lived for a day or two.

In my aviaries this year a nest was built in a cigar-box; it was more or less spherical with a circular hole at the front. Only two eggs were laid and one chick hatched on the 13th day. This was fed for two days, and then died, I think, owing to the interference of the odd cock.

The "love dance" is peculiar—the cock sidles up to the hen, twittering the while, when sufficiently near he faces her and the tail is then bent sharply from side to side, several times, after which pairing takes place.

The Pin-tailed Parrot-Finch, as also the "Common," and Three-coloured species, are quite able to winter in a cold aviary if there is reasonable shelter—for roosting in at night.

This species I find to be rather wild, and also lethargic, they sit quietly for hours on a perch—but when one enters the aviary they dash about like wild caught birds. This latter remark applies also to the Three-coloured Parrot-Finch, of which I have had two pairs. This species was, I believe, first privately imported by Mrs. Johnstone who bred them freely some of these subsequently came into Mr. Temple's hands. I believe he reared two broods from the original adult pair, in heated aviaries one spring, after which they began to moult.

A pair of the young birds he kindly presented to me, and later I purchased the old birds but cannot report any brilliant results therefrom.

The young birds never attempted to breed, and I finally sent them to the Zoo, in exchange; the old birds laid two clutches of eggs the first summer in my aviaries, but were very unsteady and did not hatch. I kept them for two seasons more, but, as no further attempts were made, I let them go to one of our fellow members who is an exhibitor. These birds should be "commoner" than the two coloured species from New Caledonia but I think there have only been two importations altogether. They are, as I have said, lazy birds inclined to be wild, and to get very fat.

I have always found them quite peaceable, but I know this is not the universal experience of aviculturists. The sexes are easily distinguishable, the colours, especially the blue on the head of the male, being much brighter than in the female.

The Common or Two-coloured Parrot-Finch is easily my favourite of these three species, he is more beautiful than the last mentioned species, and far more confiding than the Pintail, even if not so beautiful, which point I am inclined to question. I suppose it was this species which earned for the genus the name of "Parrot-Finch," for the other two commoner species do not in any way suggest to me the colouring of a Parrot of any kind.

Even the Common Parrot-Finch has one drawback, *i.e.* the difficulty of sexing individual birds, Males largely preponderate and are fairly easy to sex by their song—females must be picked out by a process of exclusion, *i.e.*, the absence of song, and the fainter colouring—also thickness of the beak.

At one time, having made several correct guesses, I went over to Mr. Temple's, confident that I should be able to help him in sorting out his males and females, which he wanted to part for the winter months. I was confident, he sceptical. We caught up about twenty birds, and sorted them out into, say, 12 cocks and 8 hens. Result, during the winter several of the "cocks" laid fertile eggs, and some of the "females" also bred. I then modified my method of sexing these birds. If I had any certain cocks I left them in the aviary; any possible hens, or newly arrived birds I put into travelling cages in different parts of the aviary. Any cage which contained a hen would shortly be constantly attended by one of the cocks; this cage I labelled "a hen"; those cages which were neglected, I took to contain cocks.

I consider the above the only method of obtaining true pairs an important point in the breeding of this species. They are very amorous, odd cocks being a great nuisance and continually tormenting breeding hens the moment they leave their nests to feed.

In my experience they like a nesting-box three or four feet from the ground, and are quite satisfied with hay as nesting material. Mr. Seth Smith found that they liked an old straw hat tacked to the wall as a nesting receptacle.

Four to six eggs are usually laid, pure white in colour, Both sexes incubate, often both simultaneously, the incubation period is 13 days—the young are fed on regurgitated seed, and mealworms are freely taken to vary the menu; a certain amount of soft food is also consumed. Maw seed is a great treat for these birds, and they will use it *ad. lib.* in feeding young.

In constrast to the other species the Common Parrot-Finch is continually on the move, displaying almost Tit-like vivacity, and in consequence he is easy to keep in health and stands cold as well as the common Sparrow. Of late, the species has been rarely imported and the few birds on the market have been bred in aviaries. It is to be hoped that in the near future these birds will be more freely imported for they are by far the most attractive of that section of birds known as Grassfinches.

To be continued.

◆

A List of Species Capable of Wintering Out of Doors.

By Dr. M. Amsler.

The Editor has asked me for a list of birds which I have wintered out of doors. It would have taken me much less time to have given a list of those species, which I have failed to keep in the open the whole year round without heat.

Six years of aviculture have convinced me that open air treatment is conducive to the best breeding results, even if some of the less fit do go under.

Birds which have been kept in a heated aviary or cage for three or four months are not nearly so fit by the spring, as those which have braved the elements during the past winter; the latter are almost always in better plumage, and also in better condition having presumably had more exercise.

The more pampered bird may be in more forward breeding condition, but the cold spring winds often cause some disaster, such as pneumonia or egg-binding.

On the other hand the birds which have had more Spartan treatment, although possibly a little later in their breeding operations, will scarcely notice changes of temperature and will merely pause in their work instead of dying.

These remarks apply with special force to Gouldian and other Grassfinches, which will attempt to nest as early as January, if kept warm, with (in my experience) constantly disappointing results. Parrot-finches are an exception to this rule, many broods having been reared in January and February. In such cases, however, it is necessary to supply artificial light at 6 a.m. so as to prolong the parents' feeding hours.

Another point is this: birds prevented from breeding by withholding nesting receptacles and materials in early spring, will often pass the whole summer in idleness and start nesting in late autumn, when again results are seldom satisfactory.

In estimating the results of outdoor winter treatment one must remember that deaths must be more frequent at this season, whether one keeps Sparrows or Sunbirds; personally I cannot attribute more than three or four deaths directly to cold, and even in these cases I think that the Thames mists did more harm than the actual cold. At the same time, it must not be thought that my birds are all left out to take their chance, many have passed one or two winters in cold or warm rooms and then have been left out, being carefully watched the while.

If one has well-built shelters and the birds are driven in on a few consecutive evenings in the autumn, they soon learn to roost indoors. The shelter should have a high span and the lintels of the doors should not reach the eaves, the birds will thus be well out of draughts, as they prefer to roost high. Large windows or skylights to the shelters will further encourage the birds to make use of them.

I know that I have wandered from my original subject, but in discussing the acclimatisation of any animal, *it is necessary to consider, the conditions of housing and climate which surround it, and also, its health at the most trying season.*

Species which have successfully wintered out :

GROSBEAKS AND BUNTINGS :

Virginian Cardinal.
Green Cardinal.
Crested Cardinal.
Pope Cardinal.
Black-cheeked Cardinal.
Yellow-breasted Bunting
Indigo Bunting.
Nonpareil Bunting.
Blue Grosbeak.
Olive Finch.
Cuba Finch.
Jacarini Finch.

TRUE FINCHES :

Green Singingfinch.
Grey Singingfinch.
Pelzeln's Safron Finch.
Common Safron Finch.
Black-headed Siskin.
*Black Siskin.
Hooded Siskin.
Sikhim Siskin.

GRASSFINCHES :

Common Parrot-finch.
Three coloured Parrot-finch.
Pintail (Nonpareil) Parrot-finch.
Zebra Finch.
Masked Grassfinch.
*Long-tailed Grassfinch.
*Gouldian Finch.
Ruficauda Finch.
Cutthroat.
Red-headed Finch.
Diamond Finch.

WAXBILLS :

Cordon Bleu
Blue-breasted Waxbill.
Orange-cheeked Waxbill.
Common Waxbill.
Golden-breasted Waxbill.
Common Avadavat.
Green Avadavat.
Firefinch.

GROUND BIRDS :

Chinese Painted Quail.
Harlequin Quail.
Rain Quail.
*Montezuma Quail
Stone Partridge.
Chukar Partridge.

VARIOUS SPECIES :

Golden-fronted Fruitsucker.
Sorry Thrush.

*Jerdon's Fruitsucker (♀).
Red-whiskered Bulbul
Yellow-headed Reed-birds.
Flame-shouldered Troupials.
Migratory Thrush (American Robin).
Orange-headed Ground Thrush
Ashy Wood-Swallows.
Diamond Doves
Golden Orioles

Those marked (*) are doubtfully hardy,

In some species I have found one or other sex to be the more delicate, usually the females—hens of Yellow-headed Reed-birds for instance, dying from a few degrees of frost, whereas my only cock lived happily through two hard winters.

All the Waxbills in my list are quite hardy if acclimatised, but Dufresne's, Black-cheeked and Ruddy Waxbills appear to be delicate.

Of the Grassfinches I have kept, Painted, Long-tailed and Gouldian Finches (even when acclimatised) have proved the most delicate.

Of species which I have found quite unable to stand frost and damp I may mention the following: Yellow-winged and Purple Sugarbirds, Black-headed Sugarbirds (a hen successfully survived one winter), Superb and Tri-coloured Tanagers.

◆

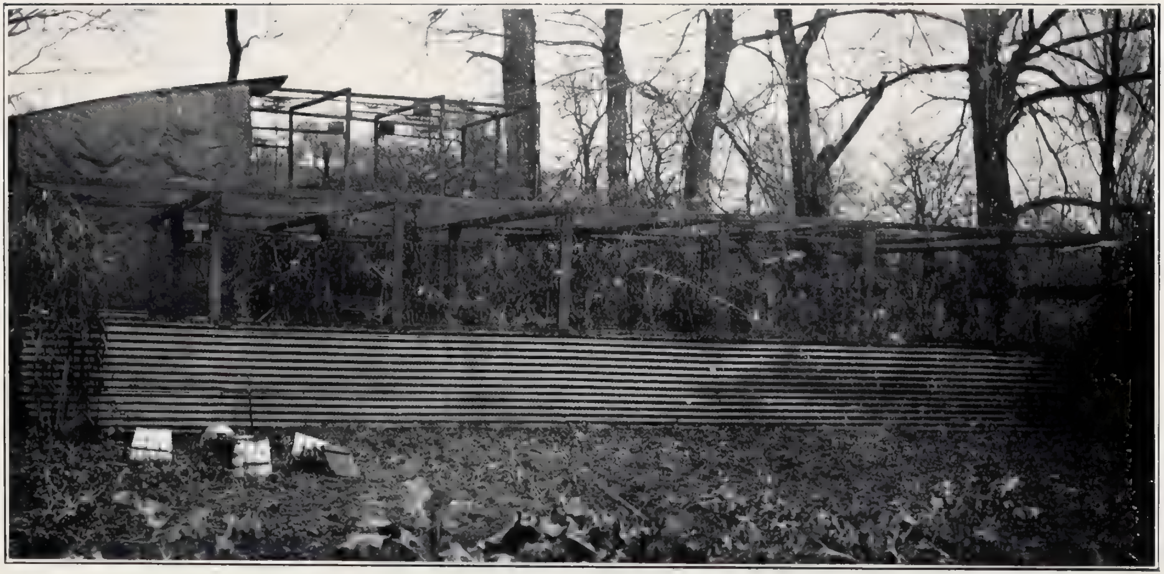
An Easter Tour Among Members' Aviaries.

By Wesley T. Page, F.Z.S., M.B.O.U.

(*Concluded from page* 334).

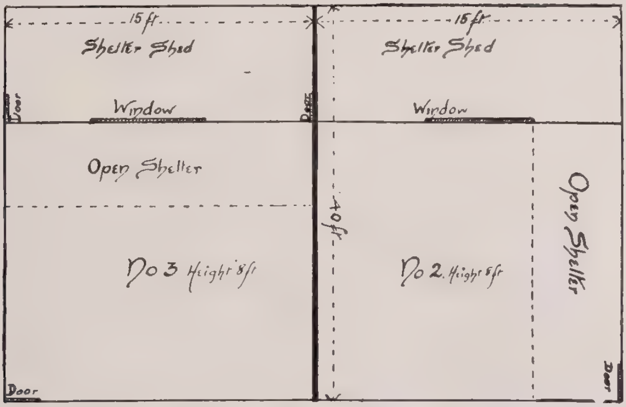
Mr. W. Shore Baily's Aviaries: We arrived here about 6 p.m., and after making the acquaintance of our genial host and hostess, found time for a run round the aviaries before dinner, though as our host was kindly putting us up for the night, we reserved serious note-taking till the next day. I will preface my remarks by stating that the practical character of Mr. Shore Baily's aviaries is typified by the results and interesting records which have appeared in this and previous volumes, together with many interesting photos illustrating the various episodes.

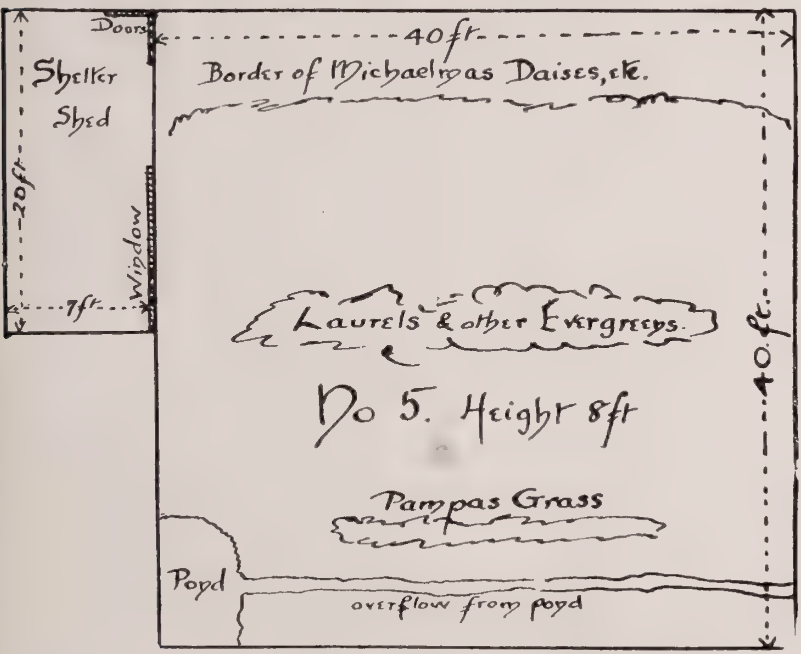
These aviaries were described in an illustrated article from Mr. Shore Baily's pen in "B.N." February 1911, page 38, to which I must refer readers, but the photo-reproduction and plans herewith will indicate the general arrangement of them for new readers. The aviaries are numerous and roomy — several 40ft. x 15ft. x 8ft.; 30ft. x 15ft. x 15ft.; and 40



Two of Mr. Shore-Baily's Aviaries. *Photo by W. Shore-Baily.*

ft. x 30 ft. x 8 ft. They are naturally planted with laurel, cypress, fir, aucuba, privet, box, elder, raspberry, currant, artichokes, rhubarb, ribbon grass, while annually wheat, oats, and other cereals are sown. Several of the aviaries have a small stream running through them and nothing is wanting for the comfort of the birds. Each aviary is fitted with a box, in which the seed-pans, etc., are placed, and a drop-door allows


15 ft.
15 ft.
Shelter Shed
Shelter Shed
Door
Door
Window
Window
Open Shelter
40 ft.
Open Shelter
No 3 Height 8 ft
No 2. Height 8 ft
Door
Door


Doors
40 ft.
Shelter Shed
Border of Michaelmas Daises, etc.
20 ft.
Window
7 ft.
Laurels & other Evergreens.
40 ft.
No 5. Height 8 ft
Pampas Grass
Pond
overflow from pond

the capture of any bird while feeding. Most of the aviaries contained ample shelters, but one or two were summer quarters only, many of the birds going into the birdroom for the winter months. The aviaries given up mainly to Parrakeets are very naturally fitted up with branches, from pieces six or more inches in diameter, to others with a diameter not more than half-inch; logs, barrels, banjo nest boxes (see plate opposite page 217 of current volume), and well planned feeding arrangements make these aviaries very practical and complete. That the birds appreciate the arrangements made for their comfort is indicated by the number of species that go to nest, Mr. Shore Baily having been fairly successful with several species of Weavers, a group which cannot by any means be called free breeders, though they have nested and reared, or partially reared, young much more frequently of late years. The various photo-reproductions which have appeared in "B.N." at various times also indicate how readily the birds adapt themselves to the natural cover provided.

I must now proceed to note the birds which were in the various aviaries, but our visit being an Easter one many of the birds were still in the bird-room. I should add that the aviary numbers used have no significance, being merely a matter of convenience for separation purposes the numbers only indicate the order in which we went round the respective aviaries.

No. 1. 1 pair Red Rosella Parrakeets, with young; Bib and Ribbon Finches (incubating); various Mannikins and Weavers; also Diamond Doves (incubating), and Diamond Finches (incubating).

No. 2. Flocks of Black-cheeked Lovebirds and Budgerigars; also a ♂ Zebra and ♀ Diamond Dove nesting.

No. 3. Pairs each of: Bauer's, Red Rosella, Mealy Rosella, and Pennant's Parrakeets; Black-cheeked Lovebirds, Bleeding-heart Doves, Blue Grosbeaks, Diuca Finches and numerous Hyphantornine Weavers.

No. 4. 1 pair Alexandrine Parrakeets with young (*vide* page 217 current volume); 1 pair Red and Mealy Rosella Parrakeets, cross-mated · pairs each of Californian Quail, Necklace and Aurita Doves, Emin's Sparrow (*Auropasser emini*) and Black-cheeked Lovebirds, the latter were incubating in a nest constructed under the tiles.

No. 5. Senegal and Half-collared Doves, Budgerigars, Black-winged Grackles, Moustache Parrakeets, Cockateels, and hybrid Californian × Squamata Quail, also Orange, Red-billed, Grenadier and Napoleon Weavers, mostly in pairs.

No. 6. Hybrid Weavers, Black-headed, and Masked Weavers,

1. Nest of Hybrid Weaver.

2. Nest of Black-fronted Weaver.

3. Nest of Golden Weaver.

Bocage's Whydah, Diamond Doves (incubating), Canaries, and hybrid Californian × Squamata Quail.

No. 7. Paradise Whydahs, Abyssinian Weavers, and Bronze-wing Doves (incubating).

No. 8. Indian Larks, Short-winged Weavers, and Bearded Tits.

No. 9. Variegated Laughing-Thrushes, Black-headed and Rufous-necked Weavers, and Mexican Black-breasted Quail.

No. 10. Rufous-necked Weavers, Orange-headed Weaver (the male parent of the hybrid Weavers in enclosure 6), Mexican Black-breasted Quail, Fieldfares, and various Hyphantornine Weavers.

It will be noted that the lists in some of the aviaries are small, but the numerous birds yet in the bird-room were to be distributed over these a little later.

I have already intimated that the arrangements described above have borne good results as manifested by the various records, successes, and partial successes, from Mr. Shore Baily's pen during the season, and I will now interpolate a brief description, illustrated by photo-reproductions of Weavers' nests, taken in the aviaries, but description is not needed, the photos speak for themselves, combined with the records which have appeared in the present and last volumes—it should be noted that these nests, and others, which have been illustrated in our pages, are not the merely ornamental playthings, with which too many Weavers in captivity occupy their time, but nests in which serious attempts to reproduce their kind have been made, and in several instances with complete success; more need not be written.

Now a few words as to the bird-room; this is a ground-floor room, attached to the house and in close proximity to the kitchen quarters, from which it is separated by a narrow hall. In this hall stands a gas boiler, which by the means of radiators keeps up a comfortable temperature in the bird-room (a large one). All round the room are spacious enclosures in two stories, lower and upper, and in these the bulk of the Passerine series pass the winter months. I will not indicate the separate enclosures of which there were at least eight or nine, but merely give a bulk list of the birds I noted in them.

Finches: Diuca, Black Seed-, Zebra, B.H. and R.H. Gouldian, Cuban, Lavender, Bicheno's, Diamond, Fire, Long-tailed Grass-, Ruficauda; also Himalayan, and Chinese Greenfinches, St. Helena Seed-eaters, etc.

WAXBILLS: Orange-cheek, Golden-breasted, Grey, St. Helena, Cordon Bleus, etc.

WEAVERS: Orange, Napoleon, Grenadier, Black-headed, Dwarf, Cape, Taba, and numerous specimens of the genus *Hyphantornis* not yet in colour

DOVES: Cape or Masked, Emerald Spotted, and Diamond.

I also noted some nice Bearded Tits.

Mid-day on Saturday came all too quickly, bringing to a close a visit which was all pleasure and interest. Our thanks and adieus to our host and hostess were spoken and we set out for Oxford, where Mr. Haggie dwells.

MR. HAGGIE'S AVIARIES: Of these there are two, the first devoted to the "Small Ornamental Finches" is not large, being only some 12 ft. x 8 ft., but is a very handsome structure and also, by the way, a very costly one for its size, costing some £50.

It is built against the buttress of the kitchen chimney, and the shelter is consequently quite warm even during the coldest weather. The flight is attractively planted with evergreens, rambler roses, abutilons, geraniums, etc., the walk through the centre being bordered on either side with grass; a small fountain and shallow basin supplies the birds with a bath and fresh water.

In this aviary Zebra, Gouldian, and Firefinches have reared young; and other species have made good attempts.

Its occupants were (from memory), as follows:

Firefinches; Red and Green Avadavats; Gold-breasted, Orange-cheeked, Grey and St. Helena Waxbills; Indigo and Nonpareil Buntings; Pin-tailed Parrot Finches, Gouldian Finches, etc.

A Yellow-winged Sugarbird has been added since, and was in exhibition trim when I had the opportunity of seeing it during a visit in mid-October.

The Parrakeet Aviary is situated some distance away at one side of the garden, faced by a small wood. This consists of a roomy shed and flight, the whole of which is roofed in, the front and one end of flight being wire netting. Here were housed in some numbers:

Budgerigars, Cockateels, White Java Sparrows, and Madagascar Lovebirds. Also Napoleon, Madagascar, Orange, Red-billed, Russ' and and other Weavers—all in the best condition.

Breeding results are usually good, and annually a fair number of Budgerigars and Cockateels are reared.

This brief look round Mr. Haggie's aviaries and birds brought our pleasant and interesting tour to an end, and a prosaic railway journey from Oxford to London, with a hurried glimpse round my own modest series, were the concluding episodes.

Now my task is finished, it has been a lengthy one, also a pleasant one—to recall the various visits, meetings and experiences with other aviculturists whom we met by the way, and their kind reception and genial hospitality—as pen has glided over paper, recording the various visits and describing the aviaries and birds; and, I can only hope that the account has been of practical interest, commensurate with the space it has occupied in our club journal.

En passant. I must express our thanks and appreciation to Mr. Haggie, senior, for his kind loan of the touring car, which made such pleasant and interesting experiences possible; and in like manner I thank my readers for allowing me to inflict this series upon them.

Now as a final word, I urge all those Members whose aviaries and birds are described herein, to send in accounts of the doings in the aviaries during the season, and more amplified details of their accommodation and collection than has been possible for me to include in so lengthy a series. Such would, I am assured, prove a most interesting and practical sequel to what I have written herein.

A Journey Across the Sierras, S. California

BY WM. SHORE BAILY.

Continued from page 321.

We lunched this day on the bank of a pond. This pond, unlike the last, was surrounded by a heavy belt of tules. While my partner was taking his siesta, I strolled around it with the dog. I was rather surprised to find that no Blackbirds were present nesting. I suppose that the elevation was too high for them. The only birds noticed were a Cinnamon Teal (*Querquedula cyanoptera*) with young that quickly vanished into the tules, a troop of half grown Moorhens (*Gallinula galeata*). and a Merlin (*Falco columbarius*); this little Hawk is locally known as the Pigeon-Hawk. It is a very plucky little bird and will easily kill a Pigeon or Quail, although they are so much larger than itself. When about half way round the pond, we surprised a Coyote, but not having the gun with me it saved its scalp. The retriever gave chase very valiantly, but when he began to overhaul the Coyote, the latter rounded on him, so that he in his turn "turned tail," the Coyote pursuing him a short distance. It takes a really plucky dog to tackle one of these animals. The State pays a bounty of five dollars for their scalps as they do a good deal of damage to young stock. After lunch we continued our way through the valley. Woodpeckers, both Green and Pied, were the commonest birds, and we saw a pair of Nutcrackers in the distance. Towards evening the trail branched off into a side canyon. ascending rapidly, so that we were soon again amongst the pines. Here we met a Rancher on a wall-eyed cayuse, carrying an ancient musket. He was the first man we had seen since leaving Fort Tejon, so we halted and had a few words with him. It appeared that a Bear had killed one of his heifers the night before, and he was out to lay up over the carcase. He rather snorted, when I asked him if it were a Black Bear. "Should I take a gun for an old Black Bear, a knife's plenty good enough for them. Guess this un's an old man grizzly, and a big un' too." I much wanted to join the old chap in his hunt, but my Dutch partner wouldn't hear of it. Said "he hadn't lost any grizzlies," so I had to give the idea up. I have no doubt but that he got his bear all right. I knew of one or two others being killed in this district, whilst I was out there. We camped this night once more amid the pines. Leaving my partner to prepare supper, I took the gun and went to look for some fresh meat. I found a covey of well grown Valley Quail, but failed to get a shot. At last I got a crack at a small flock of Pigeons (*C. fasciata*) and knocked down two. These birds are fairly common in the mountains, but do not go about in large flocks like our Wood-Pigeon. They are about the size of our Blue Rock. The most noticeable thing about them is their bright yellow legs, every other variety of Pigeon I know having red legs. My shots at the Pigeons started a Grey Squirrel, and I marked it run up a large pine. As they are very good eating, I tried to add this to the bag. After a careful search on all sides of the tree I failed to make it out. As a last resource I fired a shot into the top of the tree, which by the way was quite 200 feet high. On the report to my surprise the Squirrel ran out along the lowest branch about 150 feet up and took a flying leap towards another tree at least two hundred yards away. It sailed down as gracefully as an aeroplane, landing a few yards from the foot of the other tree, up which it scampered as if nothing unusual had happened. The skin of their lower parts is loose, and when their legs are extended at right-angles to their body, it stretches, and sets much like a parachute, but although I had occasionally shot these animals before I had no idea that they possessed these powers of flight.

The next day our road continued on a steady ascent until about mid-day when we reached the top of the pass after having walked practically all the morning. Before us was a narrow valley or canyon, the mountains on each side being practically bare of all vegetation and extremely rugged. It looked very cheerless and forbidding after the pleasant country we had been passing through. However, the track was good, and as our way was now all down-hill, we made rapid progress. Bird life was scarce, but we saw a Bald Eagle, also a couple of Magpies (*Pica nuttalli*) which looked in flight exactly like the European species. They have, I believe, yellow bills, but we were not near enough to see this. They are scarce in California and are only found in the higher Sierras, but I have seen a good many of them in the Rocky

Mountains in Utah and Wyoming. We camped this night right in the middle of the canyon in very cheerless surroundings. From a puddle of rain-water we managed to get enough to water the horse and make tea, but wood was unobtainable and we had to have resource to a small coal oil stove to heat our water. After supper I took my usual stroll around, but the only living things seen were a pair of Ravens (*Corvus corax sinuatus*)—fit birds for such a dismal country. After a cold and uncomfortable night, we were very glad to get started again and were soon out of the canyon and into a more open valley. Trees were absent but we passed one or two small lakes on which Ducks were feeding, principally Mallard and Pin-tail. One or two Hawks and Falcons were also seen, but too far off to identify. About mid-day we reached the western end of Antelope Valley and halted at a ranch for lunch—the first building we had seen since leaving Fort Tejon. We were able to buy from the rancher some bread and firewood; water he gave us. Antelope Valley is entirely surrounded by high mountains, those to the north being over 12,000 feet and very rugged; it is practically waterless as far as surface water is concerned for at least nine months in the year. The ranchers obtained their supply both for domestic purposes and stock from wells. The only tree common to the valley is the Yucca, a dwarf kind of Palm, resembling a cabbage stalk with a tuft of leaves on top. As far as I could see it is quite useless for any purpose. The valley is about sixty miles long by from twenty to thirty wide, and is crossed at its eastern end by the C.P.R. on its way from Los Angeles to San Francisco. Being at such a great elevation it is extremely healthy and is now all taken up by settlers, many of whom go in for fruit-farming. In the early days large herds of Antelopes, an animal that can go a long time without water, roamed all over the valley, but they have now been killed off or else driven into the mountains. Birds were not numerous, but we saw a good many Larks of the three kinds already noted in this paper. We also saw a pair of Road Runners and a Hawk, which I believed to be a Kestrel (*Falco sparvercus*). Snakes and Lizards were numerous, also that curious little animal the Horned Toad. We camped this night on the lee side of a small ranch house,

Photo by W. Shore Baily.

Lake Elizabeth—S. California.

and found it very cold. As wood has to be hauled twenty miles or more from the nearest timber-covered mountains, it is valuable and cannot be used recklessly, so we had little fire. The next morning we travelled along the valley for another twenty miles, when the trail took us into the mountains, at right angles to our previous course.

At lunch this day our horse had for the first time on the trip to go unwatered; but we luckily had enough water in our canteens to make coffee for ourselves. In these waterless districts birds are of course exceedingly scarce, only those like the birds of prey, who can do without water, being able to survive. As it was important that we should reach water before night we only took a short rest. After an hour or two's ascent the mountains began to be covered again with chapparal and at one place we saw a covey of Quail, a sure sign that we were not far from water. About two hours from sundown we struck a small spring and at once pitched camp. Here we found a gang of men, running a tunnel into the mountain. It appeared that they were intending to tap the waters of Elizabeth Lake, that lay on the other side of the mountains, and use them for irrigating the valley we had just left. A rather ambitious programme it seemed to me. We spent the evening smoking and chatting around their camp fire, and as several of them were old-timers, we had a very interesting time. The next morning in little more than half an hour, we topped the ridge, and Lake Elizabeth lay before us.

Lake Elizabeth is a fine piece of water, and next to Lake Tahoe, in Northern California, is, I believe, the largest natural lake in the State. It fills a basin in the mountains about 15 miles in circumference, from which three wide valleys run up into the mountains. In these valleys are quite a number of ranches, and at the head of the Lake we saw a school-house, the last we had seen being near Bakersfield, 120 miles distant. As we travelled along the lake side I was surprised to find how few birds there were: Waders were entirely absent, and a few Ducks away out on the open water were the only water-fowl seen. In the chapparal on the mountain side one or two lots of Quail and also a few Mourning Doves (*Zenaida macroura*) were again seen. They were about the size of the White-winged Dove (*M. leucoptera*) and much larger than the Ground Dove (*C. passerina*) so common around Buena Vista. After travelling round two sides of the lake we again ascended, and after an hour's stiff climb reached the divide. Here we halted for lunch. Behind us Lake Elizabeth in its setting of high mountains made a charming picture. In front the trail running between the mountains forming the southern end of the Tejon Pass, looked far less attractive. All around us was the chapparal, consisting very largely of Sage Bush, from here to the coast the commonest of all the shrubs. Bird life was scarce and no fresh variety was noted. For nearly 40 miles our way was now downhill, at first by an easy gradient, but afterwards by the worst kind of track yet encountered on the trip.

To be continued.

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Heron versus Eel Duel.

By S. Williams, F.Z.S.

While spending a short holiday at Clacton in September, my friend, Mr. F. A. Harrison, F.Z.S., showed me the photo which has been reproduced to accompany this article. Being unique it should be of interest to *B.N.* readers.

A Common Heron, while on the look out for a meal in the Stour at Flatford, near East Bergholt, Suffolk, chanced to spot a nice eel, and Heron-like made for it. Scoring a bull so to speak, it impaled the Eel with its bill a few inches from the head. The Eel, having got entangled in the reeds in the river, offered a stout resistance. The result was the Heron became exhausted, was drawn under the water and drowned. The Eel also died from the severe wound received in the neck from the Heron's bill.

When measured the Eel was 27 inches long and had a girth of five inches, weighing one and a quarter pounds. The Heron also was a fine specimen, standing 30 inches high and measuring five and a quarter feet from tip to tip of wings.

This duel took place on August 3rd, 1914.

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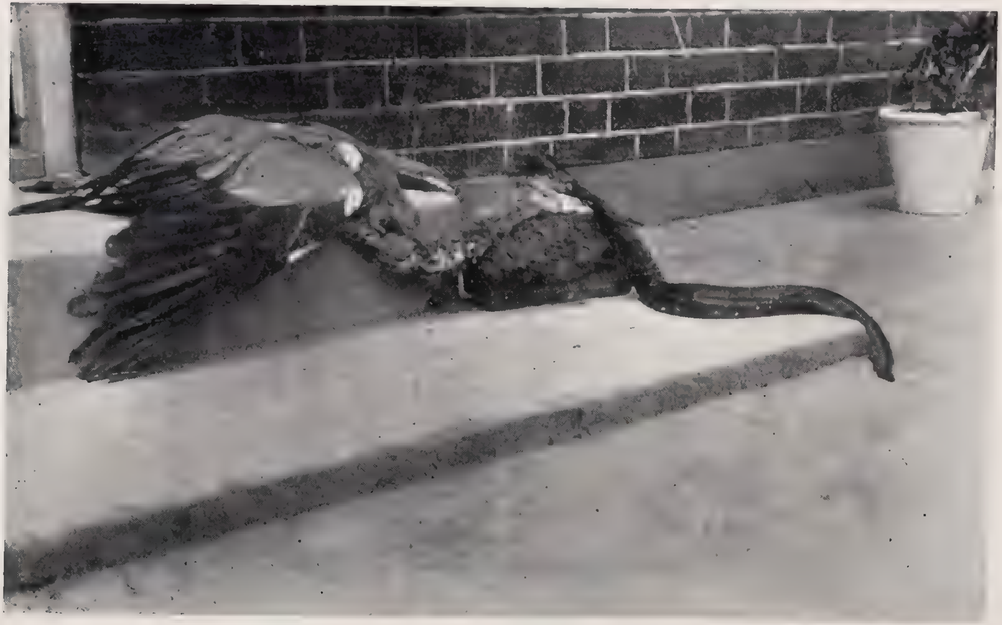

Heron and Eel. A disastrous capture.

Sir William Ingram's Birds of Paradise at Little Tobago.

PER O. MILLSUM.

Continued from page 337.

No rats are on the island, and but one kind of small snake. Supposedly broken pottery of the caribs is found and appears by no means scarce Sea birds abound, and plenty of good sea fish can be had for the trouble, or pleasure if you like, of catching them. It does not appear as though Squirrels inhabit this part of the world like they do in Tobago, and where they are such a pest to the cocoa planter. Small cleared tracks intersect the island for convenience sake in allowing one to get about and over it, the upper and central one being known as "Broadway Road." There is also brought into view the clear and deep blue sea below, and in the distance, and across Tobago shore and its mountain landscape. Among the various numbers of the wild plants which grow upon Little Tobago, two lots stand out pre-eminently, namely a palm and a sort of wild tannia, and this is due to the immense gregarious quantities in which they are met. Each is found in Tobago, but neither is ever apparently crammed together there in the masses that one sees them here. The first is the local bag palm, *Thrinax argentea,* whose leaves are of a silvery hue underneath, and the other is that known to botanists as *Anthurium hookeri*. Thousands upon thousands of each of these plants simply grow luxuriantly all over the place and in every stage of growth and development. Where they are best seen to perfection are in those positions that have been formed by the aid and shelter of the wild trees which screen and protect them from the high winds and from direct contact with the sun. The teeming numbers of large, broad and long shining green leaves, accompanied as they are with the extended tail-like dark reddish flowering and fruiting parts of the innumerable *Anthuriums*, arrest attention from the most casual of observers. This latter plant was referred to in particular, if we mistake not, sometime back by one of Sir William's sons, after he had visited his father's island, in an article he wrote for the "London Field." Many—one might say in truth, thousands of them—of the dwarfer formed *Thrinax* palms are magnificently shaped plants and would bring joy to the heart of the best of plant cultivators, could they but see such beautiful foliaged plants. But these are for Bob's glorification only. On the other hand the older of them have tall, slender trunks upon which are poised the heads of leaves with its floral and fruiting (seeding) portions nestling away up among the branches of the island's higher trees, such as one might instance as the West Indian Turpentine tree (*Bursera*), the manjak (clammy cherry), or yet again another vernacular umbrella tree (*Cordia*), Dogwood (*Piscidia*), and *Sideroxylon*. Only two ferns were seen during the few hours visit, an *Adiantum* in the ground, and a climbing *Polypodium*. A block of tall cabbage palms (*Oreodoxa*) were noticed. Of shrubs there were Clean teeth (*maba*), iron wood (*erythroxylon*), Casearias, and others of the flora of Tobago. Grasses and sedges were represented in limited genera and species, and some Passiflora and Cissas (climbers), etc., etc., are here also Upon the rocks are small "field" of the virgin orchid (*Diacrium*). One dead land shell, *Bulimus glaber*, was picked up and will be deposited at the British Museum, London, for scientific purposes. Butterflies and moths presumably are not plentiful, although scorpions are frequently seen. Besides being a world-wide traveller, Mr. Robert Herold is a poet, and an artist of some merit, and he is, generally speaking, a decidedly well-informed person. One cannot but hope these Birds of Paradise will continue to thrive in Little Tobago, and thus justify the tremendously expensive "hobby" of Sir William Ingram in bringing them to this spot, and that they will gradually perpetuate their species and increase steadily in numbers as time goes on. Such, anyway, is the sincere and humble wish of the two privileged visitors to the island on Tuesday, the 21st July 1914. We also desire to thank Mr. H. H. Tucker very sincerely for so readily allowing us to go over Little Tobago once he learned of our wish to see this interesting island, and also for placing the boat at our service for the occasion."

DAILY OBSERVATIONS AND REPORT ON LITTLE TOBAGO.

(BY ROBERT HEROLD—*Caretaker*).

August 1, 1914.—In Speyside.

,, 2.—Cannot get boatmen on account of holiday.

,, 3.—Arrive at Little Tobago at 6-40 a.m. Resuming of work, viz., clearing and planting of new paw paw ground. Heard loud calls from Apoda Hill and North Hill. Saw 2 female Apodas flying S.W. Saw 2 pair at feeding place, one young at Broadway. Heard calls from King Edward Road.

Afternoon. Went to North Hill and North Point. Saw 1 pair top of North Hill. Heard call below slope of North Hill. Went to King Edward Road. Heard 2 calls from Waterhole. Saw female Apoda.

At Broadway one male loudly calling at evening from Apoda Hill and feeding place.

,, 4.—Weather dry. Work at clearing paw paw ground completed.

Calls at early morning from Apoda Hill, North Hill and flat. One pair and one female at feeding place.

Afternoon. Went to Apoda Hill and Waterhole. Saw two females at Apoda Hill. Calls from South slope. Saw one male Apoda at Waterhole. Calls from top of Waterhole Hill. The female at feeding place, one pair at Broadway. Call from Mahoe Gully and King Edward Road. Calls from Apoda Hill at evening. Two females flying N.—S., one female behind kitchen.

August 5.—Weather dry. Shot large Hawk at early morn. Calls from Apoda Hill and North Hill. Heard one call from north side of Alexandra Hill. Saw two females top of Waterhole. Call from Broadway, one female at feeding place, two calls from end of Waterhole.

Afternoon. Went to Guinea Point. Saw one female at King Edward Road, one female at Broadway. Call from Palm Grove and south slope of Apoda Hill. At evening two females flying N.S. Two females flying over landing place S.E. Loud calls from Apoda Hill.

,, 6.—Weather very bad, cannot go out, birds silent.

,, 7.—Weather clear. Loud calls from Apoda Hill, North Hill and Flat. Went to Guinea Point. Saw one female at feeding place, one pair at Broadway, one male near by dancing. Calls from East-road. Shot one fowl (hen) and two half-grown chicks..

,, 8.—Weather very rainy. Birds silent during morning. Loud calls at evening from Apoda Hill, saw two females flying N.S. One small Shark in bay.

,, 9.—Weather very clear. Loud calls from several points, also saw several males and females at North Hill, Apoda Hill, Waterhole, and Broadway Road, one female in tree close by.

Similar reports continue, but I will now quote:

REPORT IN GENERAL.

. . . .

There is no change in the lives of the Apodas, they are as well as ever. In rainy weather they keep rather silent, but when it is fine they are heard all over the island. I have kept hidden half-way up trees, which I have climbed and which Apodas frequent, to make sure of the right shade of colour of head and throat of females, and I can say now with certainty that it is a deep metallic indigo blue. All other parts of the body are brown, except at the end of belly towards tail, a light greyish pink. I have received the colours from Mr. Brash, and I shall try to colour the sketches of Apodas the proper shades. I shall forward sketches *via* New York. Fowls are seen again now and then. I have shot three, also a shark in the bay. All Hawks I have seen I have shot; there are very few and they are all strangers.

. . . .

I will now continue with an abstract of letter sent to Sir William Ingram.

"When Mr. Brash visited the island he saw several Apodas, viz., four females in one tree, two females flying close by when leaving for another place, one male Apoda flying towards Alexandra Road, and we heard several calls from different directions. Sitting in the gallery of house he saw a large male passing north—south below house, and a male later on. He also saw a female sitting at a long distance, but before he could bear the glasses on it, it disappeared. There can be no mistake at all between male and female Apodas. The male is, as you said, a larger bird than the female, and can be distinguished from a long distance, even when flying, by its yellow colour at the back of its head. The female is all brown, but around the eyes and the back of the head, also part of throat there is a very deep colour, which I take for very dark indigo blue. It may be a very dark purple brown. The female bird is certainly smaller and appears more slick. I shall write to-day to Mr. Brash for a few tubes of colour for myself, and then I will try to send you a coloured picture of male and female. I shall try to draw a little sketch now.

There are certainly two distinct colours in a female Apoda, but it is impossible to make a mistake as to the sex of the birds. I am very sorry Mr. Brash had no chance to view a male bird at a close distance. Both males he saw were in flight. As to the number of the different sexes I can state that there are: 4 males, 10 females, 1 young (sex unknown). These are the numbers I can vouch for. There may be two or three more, but there are certainly no less. It is impossible to say that there are exactly such a number of each sex on the island as they are never to be seen altogether and counted. I have done all that is possible to get a clear estimate, and what I have stated is the the minimum, as I can run no chances in such an important matter. If the birds were not so restless and would keep together, it would not be so difficult, but they are such a disagreeable lot of birds and never keep up friendship with each other. So they are sometimes in pairs, mostly single, and never in greater numbers than four or five, and those on rare occasions.

I have tried to explain matters as well as I can, but hope soon to send you sketches in colour, which will explain things better.

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Editorial

Space is again very limited, and bare lists only are possible. All are subsequent to the results given in August *B.N.*, and refer to young birds fully reared.

R. Suggitt, Cleethorpes.

Lesser Grey-headed Guan (*Ortalis vetula*)—2.

White-throated (*Spermophila albigularis*) × Grey Finch (*S. grisea*)—1.

T. Hebb, Luton

Peach-faced Lovebirds (*Agapornis roseicollis*)—5.

Zebra Finches (*Taeniopygia castanotis*)—numerous.
Red Avadavats (*Sporaeginthus amandava*).
Green Avadavats (*Stictospiza formosa*).
Cordon Bleus (*Estrilda phoenicotis*).
Bib Finches (*Spermestes nana*).

H. BRIGHT, LIVERPOOL.
Diamond Finches (*Steganopleura guttata*).
Red-headed Finch (*Amadina erythrocephala*) × Cutthroat (*A. fasciata*)—3
Zebra Finches (*Taeniopygia castanotis*).
Cuban Finches (*Phonipara canora*).
Magpie Mannikins (*Amauresthes fringilloides*)—2.
Gouldian Finches (*Poephila gouldiae*).
Diamond Doves (*Geopelia cuneata*).
Red Mountain Doves (*Geotrygon montana*).

DR. J. EASTON SCOTT, WALLINGTON.
Gouldian Finches (*Poephila gouldiae*)—5.
Firefinches (*Lagonosticta senegalis*)—3.
Hybrid Black-headed Siskin × Canary—15 during the season.

MISS E. F. CHAWNER, LYNDHURST.
Hybrid St. Helena Seed-eater (*Serinus flaviventris*) × Linnet (*Linota cannabina*)—2.
Zebra Finches—5.

W. O. MONTGOMERY, HORNSEA.
Californian Quail (*Lophortyx californica*)—3, second brood.
Olive Finches (*Phonipara lepida*).—2.
Bib Finches (*Spermestes nana*)—2.
Spice Finches (*Munia punctulata*).
Orange-cheeked Waxbills (*Sporaeginthus melpodus*).
Red Avadavats (*S. amandava*).
Spice Finch × Bengalese hybrids.
Silverbill × Bengalese hybrids.

REV. G. H. RAYNOR, HAZELEIGH.
Gouldian Finches (*Poephila gouldiae*)—4.

REV. E. P. GORRINGE, STURMINSTER NEWTON.
Silverbills (*Aidemosyne cantans*)—3.
Zebra Finches (*Taeniopygia castanotis*)—2.
Bib Finches (*Spermestes nana*)—1.

DR. LOVELL-KEAYS, EAST HOATHLY.
Rosella Parrakeets (*Platycercus eximius*), second brood.
Zebra Finches (*Taeniopygia castanotis*), several broods.
Cuban Finches (*Phonipara canora*)—3.
Mexican Rosefinches (*Carpodacus mexicana*)—2.
Cordon Bleus (*Estrilda phoenicotis*).
Red Avadavats (*Sporaeginthus amandava*).
Fire Finches (*Lagonosticta senegalis*).
Diamond Doves (*Geopelia cuneata*).

Californian Quail (*Lophortyx californica*).
Passerine Parrakeet (*Psittacula passerina*)—1.
Long-tailed (*Poephila acuticauda*) × Masked Grassfinch (*P. personata*)—2.
Green Avadavat (*Stictospiza formosa*)—2.

C. E CROKER, LOWER BOURNE.
Quaker Parrakeets (*Myopsittacus monachus*)—2, second brood.
Chaffinches (*Fringilla coelebs*)—2.
Ribbon Finches (*Amadina fasciata*).

W. T PAGE, MITCHAM.
Black Tanager (*Tachyphonus melaleucus*)—2.
Napoleon Weaver (*Pyromelana afra*)—1.

J. SMITH, KENDAL.
Magpie Mannikins—4.

The above records do not include such as have previously appeared as articles.

We recently were privileged to visit the aviaries of Mrs Lee, Mr. W. H. Fisher and Mr. C. E. Croker, all of whom have interesting series of birds; a description will appear in a near issue.

THE L.M.T. CRIPPLES' HOSPITAL AVIARIES: We recently visited these aviaries and found birds and aviaries in good order. Red-billed Weavers (two broods) have been successfully reared again this season together with other species. Success was nearly achieved by the Yellow Bunting, but full details will be given in a near issue. The following gifts of birds have been recently sent by some of our members to whom we tender our best thanks.

1 Cockateel (♀)—Dr. L. Lovell-Keays.
2 Zebra Finches—Miss E. Lucas.
1 Cactus Conure—Lady Edith Douglas Pennant.
1 Nenday Parrakeet—Lady Edith Douglas Pennant.
1 Cockateel (♀)—Lady Edith Douglas Pennant.
1 Zebra Finch—Rev. J. Paterson.
6 Silverbills—Rev. J. Paterson.
1 Bengalese—Rev. J. Paterson.
1 pair Indigo Buntings—Rev. J. Paterson.
1 Green Singingfinch (♂)—Rev. J. Paterson.
1 Grey Singingfinch (♀)—Rev. J. Paterson.

Other gifts of Parrakeets, Finches, etc., will be gratefully acknowledged by the Trustees.

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Correspondence.

NESTING NOTES.

Sir,—In response to your request for results, the following are my records for the season to date:

Zebra Finches (*Tæniopygia castanotis*)—several broods reared.
Flame-shouldered Troupials (*Agelaeus humeralis*)—nested, but did not lay
American Robin (*Turdus migratorius*)—one young bird reared.
Orange-headed Ground Thrush (*Geocichla citrina*)—two young reared.
Scaly-fronted Finches (*Sporopipes squamifrons*)—numerous clutches, did not rear.
Peach-faced Lovebirds (*Agapornis roseicollis*)—several clutches, young now in nest.
Blue-winged Sivas (*Siva cyanuroptera*)—built nests only.
Common Waxbills (*Estrilda cinerea*)—three broods reared.
Violet-eared Waxbills (*Granatina granatina*)—reared young to twelve days, then cock died.
Diamond Doves (*Geopelia cuneata*)—numerous young reared.
African Finch-larks—nested and laid a clutch of eggs, but did not hatch out.
Golden-fronted Fruitsuckers (*Chloropsis aurifrons*)—built nest only.

Eton, 12/10/14. (Dr.) M. AMSLER.

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Birds of the Jhelum District and an Ornithological Diary from the Punjab.

BY H. WHISTLER, I.P., M.B.O.U.

July 29.—Visited a large flood of canal water, which had been allowed to overflow into a field of coarse grass mixed with bushes, in the middle of which there is normally a small pool. Here I found a pair of that handsome Duck the Spot-bill (*Anas poecilorhyncha*) who allowed me to approach quite close before they rose. This is one of the very few species of Duck that nest in India; they are known to breed in this district. Some way off, where the water was more shallow I found a number of White Ibis (*Ibis melanocephala*) feeding in company with several Cattle Egrets (*Bubulcus coromandus*) and Pond Herons (*Ardeola grayi*). With them were a flock of about 20 Wood-Sandpipers (*Totanus glareola*) newly arrived on migration. Over the water a large bird of prey was beating up and down, and as I could not quite make out the species, I shot it and found I had secured a young Brahminy Kite (*Haliastur indus*), very different in its dull livery of rich browns to the highly coloured chestnut and white of the adult. Some other birds seen in the distance were probably of the same species, and an adult was reported to me next day, so there are probably a number in now on migration. The stomach of the bird shot was crammed with insects, which included dragon-flies!

Some Rose-coloured Pastors were seen, besides two huge flocks of birds that were either Parrots or Bank Mynahs.

Several Tree-Warblers, similar to those of yesterday.

A White-necked Stork noted.

July 30.—Worked a large extent of grass and bush-covered jungle, in the Government Farm Bir, where the most interesting find was a male of the Bristled Grass-Warbler (*Chaetornis locustelloides*)—a curious Babbler-like Warbler, 8½ inches long, with 5 rictal bristles placed vertically before the eye. This is the first time that I have met the species, which does not seem to have been previously recorded so far to the North-west. I flushed it from a bush at my feet, and flying a short way it settled on the tip of another bush, where it sat watching me without any of the shyness of the Reed Warbler..

Near the same place a pair of very brilliantly coloured quail got up, but I do not know the species nor could I secure one of them.

This type of jungle affords a refuge for hundreds of small Wren-Warblers and I found nests with eggs of the Rufous-fronted Wren-Warbler (*Franklinia buchanani*), the Indian Wren-Warbler (*Prinia inornata*) and the Rufous Fantail-Warbler (*Cisticola cursitans*). A neat nest built between two leaves (which had been sewn together after the manner of the Tailor-Bird), probably belonged to the Ashy Wren-Warbler (*Prinia socialis*), but it was empty.

It is interesting to note that in this undisturbed jungle the Weaver birds (*Ploceus baya*) build their nests on quite low bushes, where they can be reached from the ground. In the cultivation near my bungalow they build in tall trees.

In this part of the jungle there is a large tank of shallow water, mostly overgrown by tall elephant grass. This grass at dusk was full of *Ploceus baya*, common House Sparrows, and a few Avadavats (*Sporaeginthus amandava*) who kept up a continuous twittering. On the weeds of the jheel were a few Pheasant-tailed Jacanas (*Hydrophasianus chirurgus*) which is, I believe, only a Rains visitor here. A small Bittern seen appeared to be *Ardetta cinnamomea*.

July 31.—Four fresh eggs of the Black-headed Mynah (*Temenuchus* *pagodarum*) found in a nesting hole of a Barbet, which I had opened a month or two ago. The hole was about a foot deep, situated on the under side of a sloping bough of a Kikur tree, and I had opened out the greater portion of it, leaving only the actual chamber and a couple of inches of the passage. In this the Mynahs had laid a few small green leaves and a piece or two of grass, and laid their eggs in most dangerous proximity to the open air.

A slight increase in the number of Rose-coloured Pastors noted.

RESUME OF THE MONTH.

The chief feature of the month, of course, has been the number of birds which were breeding, but in addition to this there have been traces of a certain amount of migration. As far as I can make out, this migration has been of two kinds, Firstly a certain number of species (most of which probably commenced arriving last month) have arrived as Rains visitors and as some of these, I believe, come here for breeding purposes, this movement must be considered in the light of belated spring migration. As examples may be mentioned the cases of *Coccystes jacobinus*, *Coturnix coromandelicus*, and perhaps *Hydrophasianus chirurgus*.

In addition to the above a considerable number of birds have arrived as fore-runners of the great passage. Of these the most notable are *Pastor roseus*, who have steadily increased in numbers towards the end of the month. Another good example is given by *Totanus glareola* and *Hypolais rama*. Unexpected and unusually early migrants were the Wagtails noted on July 20th. These must be regarded as stragglers.

A certain number of *Totanus ochropus* were seen during the month, but these may have been some of the many non-breeding individuals, which undoubtedly summer every year in India.

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AUGUST.

August 1.—Found a nest of the Common Coucal or Crow-Pheasant (*Centropus sinensis*) containing three fresh eggs. This was a large domed structure of dead reed-like grasses, without any lining, placed in the top (about six feet from the ground) of a clump of spear grass in a small overgrown pit by the railway.

Four eggs in a nest of the Common Babbler (*Argya caudata*), placed in a low thorn bush.

Several pairs of Grey Partridges (*Francolinus pondicerianus*) noted with one or two young birds. Very few birds seem to be able, thanks to Jackals, Foxes and Cats, to bring up more than one or two young from each brood, but those young birds that are reared prove themselves (thanks to natural selection) entirely worthy of their crafty parents.

I shot a female Bristled Grass-Warbler (*Chaetornis locustelloides*) which from its incubation patch, was clearly a nesting bird, but a careful search in the neighbouring grass and bushes failed to discover the nest.

A single Common Sandpiper (*Totanus hypoleucus*) noted was the first of the autumn migration.

Two Painted Storks (*Pseudotantalus leucocephalus*), one Black-necked Stork (*Xenorhynchus asiaticus*), several White-necked Storks (*Dissura episcopus*), and some White Ibis (*Ibis melanocephalus*) noted.

A Cormorant seen flying over high was probably *Phalacrocorax carbo*.

August 2.—There are now about many Tree-Warblers (*Hypolais rama* and *H. caligata*) which remained about until the end of the month. They creep about in bushes and trees uttering a harsh chipping note, and are very difficult to identify with certainty.

August 3.—Went to Barwahla and back by train, noting from the windows some Coursers, probably *Cursorius coromandelicus*, and some Rufous-tailed Finch-Larks (*Ammomanes phoenicura*).

August 7.—A male Lesser Floriken (*Syphoetis auritus*) was seen in the Bir and reported to me.

I saw a Raven by the city—the first that I have seen for a long time. Some Swallows noted that were perhaps *Hirundo rustica*.

August 8.—Four fresh eggs of the Black-headed Mynah (*Temenuchus pagodarum*) found in a nest which was situated in the slanting trunk of a Kikur tree about 15 feet from the ground. The hole, which was about a foot deep, was on the upper surface of the bough. The nest was composed of fine stems mixed with a few feathers.

A Nightjar flying by my house in the evening.

August 10.—Saw a Magpie-Robin (*Copsychus saularis*) for the first time in this place.

August 11.—A few Wagtails seen; probably all specimens of the Large Pied Wagtail (*Motacilla maderaspatensis*). Very few have been seen for some time. Many White Ibis noted; also a single specimen of the Painted Stork (*Pseudotantalus leucocephalus*).

August 12.—A Red-headed Merlin (*Aesalon chicquera*) and a Nightjar noted near my house.

August 13.—Drove out to some bush jungle filled with luxuriant grass and other undergrowth, where I found numbers of Tree-Warblers, apparently both Sykes' (*Hypolais rama*) and the Booted Tree-Warbler (*H. caligata*), which were in the bushes and in the grass. Here also were a fair number of White-eyed Buzzards (*Butastin teesa*), while in the shorter grass were a few Rain Quail (*Coturnix coromandelica*) and Button Quail (*Turnix dussumieri*). Two Green Sandpipers noted.

August 14.—Under a canal culvert I found a nest of the Wire-tailed Swallow (*Hirundo smithii*) which was a fairly deep saucer of mud, similar to that of *Hirundo rustica*, except that it was attached by one edge to the lower surface of the arch of the culvert and not supported underneath by any projection. It contained unfeathered young. Also unfinished nests of the Rufous Fantailed Warbler (*Cisticola cursitans*) and the Rufous-fronted Wren-Warbler (*Franklinia buchanani*) found.

A Wagtail noted was apparently the Masked Wagtail (*Motacilla personata*).

August 15.—A Crested Honey-Buzzard (*Pernis cristatus*), noted near my bungalow. What was perhaps the same bird was noted about on several subsequent days until the 27th, when I shot and skinned it. The bird proved to be an immature female and its stomach contained honeycomb and vegetable matter.

Several Finch-larks (*Ammomanes phoenicura* and *Phyrrhulauda grisea*) noted about. Also a White Ibis and a King Vulture (*Otogyps calvus*).

To be continued.

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Post Mortem Reports.

South American Hawfinch. (The Hon. M. Hawke, Tadcaster). The cause of death was pneumonia.

Paradise Whydah. Geo. Scott Freeland, Tonbridge. Cause of death, pneumonia.

Sunbird (♀). (B. T. Stewart, Glenhurst, Radlett, Herts). Cause of death, exhaustion following epileptic seizure. The lungs were congested.

Golden-Fronted Sunbird. (Miss Augusta Bruce, Wakefield). Cause of death, pneumonia.

Zebra Finch. (Miss Clara Bowring, Worcestershire). Cause of death, pneumonia.

Necklace Tanager (♂). (B. Steed, Sudbury). Cause of death, cardiac failure.

Grey Singing-Finch. (Theo. Foster, Babbacombe, Devon). Cause of death, pneumonia.

Golden-breasted Waxbill. (Mrs. Williams, Exeter). Cause of death, acute yellow atrophy of liver.

Gouldian Finch (♀). (B. Steed, Sudbury). Cause of death, pneumonia.

Canary. (S. Williams, Edmonton). The bird died from enteritis.

Yellow Budgerigar. (Mrs. Davies, Warrington). The bird was too fat; its liver was almost all fat. No doubt death was due to syncope.

Weaver and Thrush. (D. Mason, Broadstairs). Cause of death pneumonia.

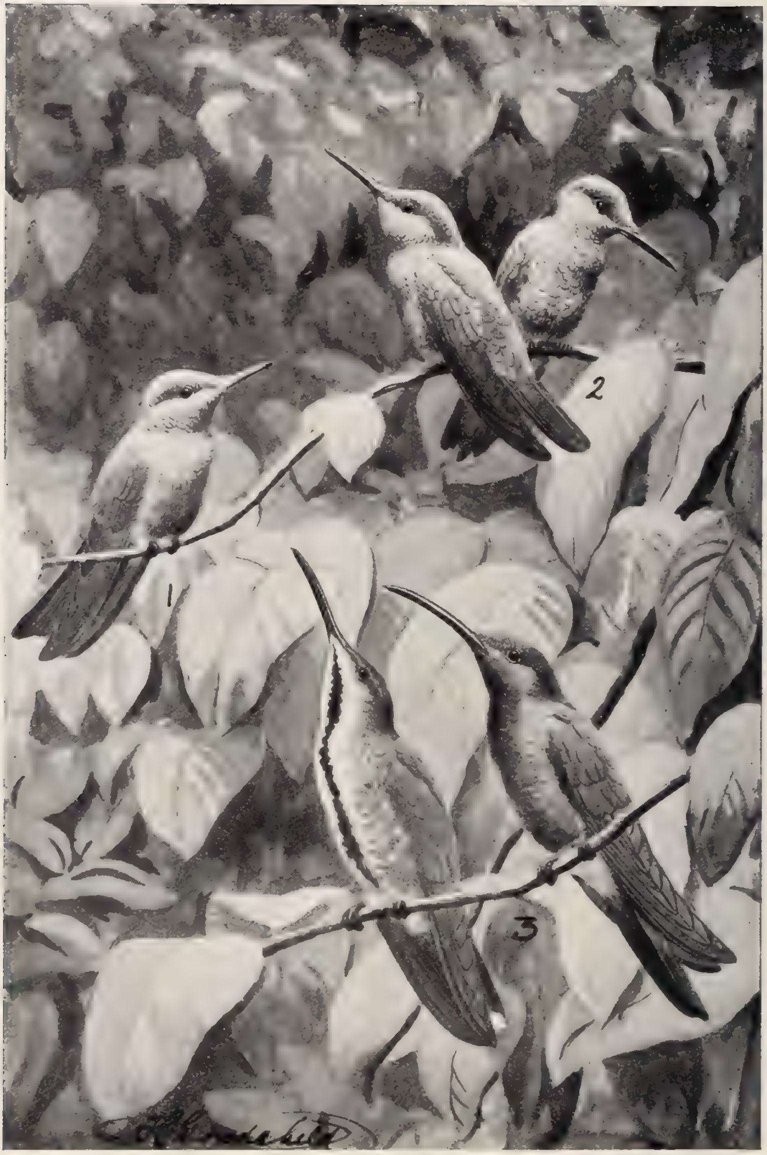
Young Goldfinch. (Dr. Geo. Masters, Bury-St.-Edmunds). The cause of death was coccidial enteritis.

Blue-winged Lovebird. (Mrs. E. Travis, Stourbridge). The cause of death was a septicaemia, which is very common in such birds, and manifests itself soon after purchase from not too sanitary bird-shops. It was a male.

Lavender Finch. (W. A. Swayne, 29, Percy Place, Dublin). Cause of death, acute enteritis.

Answered by post—Miss Violet F. Blandford; Geo. Scott Freeland; Mrs. Turner-Turner.

HENRY GRAY, M.R.C.V.S.



Humming Birds. *Drawn from life.*

1. Ruby Crest (*Chrysolampis moschitus*). 2. The Amazilis ♂ & ♀ (*Amazilia felicioe*). 3. Prevost's Mango ♂ & ♀ (*Lampornis prevosti*).

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BIRD NOTES:

— THE —

JOURNAL OF THE FOREIGN BIRD CLUB

Birds Seen During A Trip To The West Indies.

By E. J. BROOK, F.Z.S.

I have just returned from the West Indies after a most delightful and interesting trip.

I am afraid I cannot write a good article on the birds I saw, as I kept no notes, having put pen to paper as little as possible while travelling, and for that reason these notes have been held back a considerable time [dated March 7th, 1914.—ED.].

The Birds in Jamaica were disappointing; the Mongoose has, I am informed, destroyed many of them.

The most beautiful were, of course, the Humming Birds, of which there are three species on the island, viz.:

Mango Humming Bird (*Lampornis mango*)—Total Length 5ins., tail 1¾ins.

Long-tailed Humming Bird (*Trochilus polytmus*)—Total length 10ins., tail 7½ins.

Vervain Humming Bird (*Mellisuga humilis*) Total length 2⅝ins., tail ¾in.

I saw two of these constantly, and, I think, I once caught sight of the third or rarer species (The Mango).

Among the Mangrove Swamps, on the north coast of the Island, the small Blue Heron (*Ardea caerulea*), and a large white bird, that I took for a Spoon-bill, were constantly seen.

About the verandahs of the Hotel at Montego Bay were the Banana Bird (*Icterus leucopteryx*), and the All-Black Grackle (*Nesopsar nigerrimus*).

A very common Grackle is the Tinkling Grackle (*Quiscalus crassirostris*), which is strictly protected by everyone, owing to its usefulness in destroying the ticks, which infest the grass and do a great deal of damage to horses and cattle.

At Castleton Gardens I saw that beautiful little bird the Jamaican Tody (*Todus viridis*), they are reported as being common, but I only saw this one specimen. The following extracts are from Gosse's "Birds of Jamaica":

"Always conspicuous from its bright grass-green coat, and "crimson-velvet gorget, it is still a very tame bird; yet this seems "rather the tameness of indifference than of confidence; it will allow "a person to approach very near, and, if disturbed, alight on another "twig a few yards distant. We have often captured specimens with "the insect net, and struck them down with a switch."

"It is a general favourite, and has received a favourite name, "that of Robin Redbreast."

"I have never seen the Tody on the ground; but it hops about "the twigs of low trees searching for minute insects, occasionally ut-"tering a querulous, sibilant note. But more commonly it is seen "sitting patiently on a twig, with its head drawn in, the beak pointing "upwards, the loose plumage puffed out, when it appears much larger* "than it really is. But this abstraction is more apparent than real; "if we watch it, we shall see that the odd-looking grey eyes are "glancing hither and thither, and that, ever and anon, the bird sallies "out upon a short feeble flight, snaps at something in the air, and re-"turns to his twig to swallow it."

"I have never seen the Tody eating vegetable food; but I have "occasionally found in its stomach, among minute coleopterous and "hymenopterous insects a few small seeds. One, which I kept in a "cage, would snatch worms from me with impudent audacity; and then "beat them violently against the perch or sides of the cage to divide "before he swallowed them."

"One, captured with a net in April, on being turned into a "room, began immediately to catch flies, and other minute insects that "flitted about, particularly little *Tineidae* that infested my dried birds. "At this employment he continued incessantly, and most successfully, "all that evening, and all the next day from earliest dawn to dusk. ". . . . . . and although I took no account, I judged that on an "average, he made a capture per minute."

"As it sits on a twig in the verdure of spring, its grass-green "coat is sometimes undistinguishable from the leaves in which it is "embowered, itself looking like a leaf; but a little change of position "bringing its throat into the sun's rays, the light suddenly gleams as "from a glowing coal. Occasionally too, this crimson plumage is puffed "out into a globose form, when its appearance is particularly beau-"tiful."

"The Tody, as has been long known, builds in holes in the "earth, in the manner of the Kingfisher. . . . . . . The combination "of circumstances that make up a fit nesting place for it, may be well "understood from the following selection of a burrow, by a pair of "birds, in the garden of a friend. A box filled with earth had been "placed on tressels within water, for growing lettuces from seed, or

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* Total lenght $4\frac{1}{4}$ins., tail $1\frac{1}{2}$.

"rather for sowing the seed, while vegetating, from the depredations "of ants. The box had performed its office;—the lettuces had been "transplanted, and the mould remained in undisturbed fallow. The box "having a knot-hole in the side, through this hole a pair of Todies "burrowed a gallery into the heart of the mould, built a nest, and "reared a family of young ones. . . . . . . On opening the earth "after the young had fled, there was found a capacious winding gallery "into the centre of the box, ending in a circular lodging, in which was "contained the nest, composed of fibrous roots and cotton."

The Parrots, I believe, are not very common in Jamaica, though Gosse includes the following:—

Yellow-headed Macaw (? *Ara tricolor*)=(*Ara gossii*).
Yellow-bellied Parroquet (*Conurus flaviventer*)=(*C. nanus*).
Black-billed Parrot (*Psittacus agilis*)=(*Chrysotis agilis*).
Yellow-billed Parrot (*Psittacus leucocephalus*)=(*Chry. leucocephalus*).

I only saw one pair, viz.: The Yellow-bellied Parrot (*Conurus nanus*), and these curiously enough, at a place where, I believe, they are not often seen, at a beautiful spot near Bog Walk.

The Red-headed Turkey-Buzzards (*Calthartes aura*) are seen everywhere and are preserved as scavengers.

Along the roads one is always seeing various kinds of very pretty Doves and Pigeons, I am not quite sure what species I saw, but, I think, they were: Pea Dove (*Zenaida amabilis*), Passerine Ground Dove (*Chamaepelia passerina*, and another of a rich chocolate colour, probably the Partridge Dove (*Geotrygon montana*).

The sea birds most in evidence here and in other parts of the West Indies are, the Frigate Bird and the Brown Pelican (*Pelecanus fuscus*); the latter is a quaint bird that always seems to commence fishing when the daily breeze springs up. Anything more clumsy than the way the Pelican catches fish can hardly be imagined. The bird seems to suddenly collapse while in flight, and tumble into the sea; it then sits on the water looking the picture of misery, and with an expression that seems to say, "Another sell, what a fool I made of myself again," but it has swallowed a fish all the same.

From Jamaica the next place visited was Colon and the Panama Canal. What a paradise for water-fowl that enormous artificial lake will be! Small Blue Herons, White

Herons, and others are numerous, also Grebes and other water-fowl.

Along the railway line various bright coloured birds were occasionally seen; mostly I think Tanagers and Fly-catchers, but the windows of a train are not the best places to study bird life from.

At Cartagena and Puerto Colombia all one saw consisted of a few sea birds, and the numerous Yellow-fronted Amazon-Parrots brought to the ship for sale. I was much struck by the healthy and clean condition of these birds, which seemed to show that they were well treated by their owners. An amusing sight was a crate full of Parrots, on top of which was a tame monkey; a friendship had sprung up between one of the birds and the monkey, and while the latter would play all sorts of tricks on the other Parrots, it diligently scratched the head of its friend in the most solemn manner possible.

A deplorable sight was the number of Egret plumes brought on board for sale and, when some of the passengers objected, the usual tale was told about the feathers being gathered at moulting time from Heronries where these birds were strictly preserved. I asked a gentleman who had lived many years in Colombia if there was any truth in this story. He laughed at the suggestion as absurd. Of course, this story of preserved colonies of the White Heron is quite untrue, and is told to try and hide the unspeakable cruelty attached to the trade in this article of female adornment.

Trinidad was the most interesting place for birds I stayed at, and there I saw far more kept as pets than anywhere else. The bird-keeping people in this island seemed to be mostly East Indians; the negro does not seem to care much for pets. There are also a large number of Chinese, who are, of course, great bird lovers. The birds usually seen caged are: Common Hangnests, Amazon-Parrots, Maroon and Violet Tanagers and some small Finches.

Here, as elsewhere, the dense jungle makes it difficult to see the birds, but every now and then in the course of a journey through the island, Maroon Tanagers, Kingfishers, Flycatchers, and other bright and interesting birds are to be seen.

At the Queen's Park Hotel, at Port of Spain, a pair of Tanagers of a dull green colour and blackish wings were feeding on the fruit of a palm of some sort; the hen had the misfortune to fly against the branch of a tree and kill herself the day before I left. The loathsome looking Turkey-Buzzard (*C. atratus*) is here, as elsewhere in the West Indies, protected as a scavenger, but the species seen in Trinidad is the dark-headed one, and not the red-headed as seen in Jamaica.

Humming Birds are numerous, wherever any honey-bearing flowers are in bloom, and buzz about as if in a state of perpetual motion.

It is quite evident that anyone visiting this part of the world must not expect to see quantities of birds wherever he goes; the jungle is their home and there most of them remain. No doubt if anyone likes to rise early, and perhaps travel far to some secluded spot he will be amply rewarded; the birds are there, but the thing is to see them, and, to do this, it is necessary to be awake as early as they are, and to be in their haunts soon after daybreak.

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Parrot Finches *(Erythrura).*

BY WESLEY T. PAGE, F.Z.S., ETC.

(*Continued from page* 357).

THE THREE-COLOURED PARROT-FINCH (*E. trichroa*). This species has always been quite rare on the English Bird-market, and, I think, Mrs. Johnstone was the first to possess it. Her specimens were collected and brought over personally by our member, Mr. Walter Goodfellow, with other rare birds, from New Guinea.

VARIOUS IMPRESSIONS OF THE SPECIES:—

1. Rather timid and placid birds, have a very rapid flight, which is not very often indulged in. Quite inoffensive with other birds. The hen differs from the male in her slightly duller colouration.
2. Lethargic, wild when aviary was entered, and apt to become very fat. Amiable in demeanour. Capable of

wintering out of doors if there is a good shelter attached to the aviary.

There is no need to increase these impressions as all bear a strong family likeness to those already given.

Mrs. Johnstone found them to be free breeders and she also successfully crossed them with the Common Parrot-Finch. (The resultant hybrids possessed bluish heads and a *red throat*, thus readily distinguishing them from the species). This species has also been bred quite freely on the Continent, some of which have reached this country, and being related birds probably accounts for some having had but poor success with the species.

In 1910 our member Mr. W. R. Temple had nine young birds of this species fully reared in his aviary. Dr. Amsler has also bred the species, but he has already recorded his experience with this and other Parrot-Finches.

Though not so brilliantly coloured as the Common Parrot-Finch, the Three-coloured is very pleasing in its softly blended garment of green, blue, and red. It only needs to be more freely imported for it to become a general favourite

THE PIN-TAILED PARROT-FINCH (*E. prasina*). It is to be regretted that so beautiful and freely imported a species is not longer lived in captivity, as though there are notable instances of longevity, the majority of aviculturists look long at their money, moderate as the price is, before parting with it for newly imported specimens of this species, and notwithstanding the lengthy period it has been known to captivity and kept, the record and *experience* of loss, has, as yet, thrown but little light as to the causation thereof.

Personally, I must confess that I have had very few of this species and most of the specimens which have come my way have been established birds which I have given a home to; most of these had generally been more than a year, some two or three in captivity, but three years was the longest a specimen has lived with me, most joining the majority within a year; however, they all had to take their chance with other Finches out of doors during the summer months and to share an indoor flight with small soft-bills during the winter. The one which lived three years with me spent the whole period out of doors, never looking in any but ' spick and span " condition, and was so when picked up one summer-day dead. However, I have never seriously attempted to acclimatise the species, and therefore shall not attempt to dogmatise. I may have formed conclusions from others failures and successes, but this is not the time to express them, as I want our members who have kept this species to describe fully their methods, success, or failure or both. I am pleased that Mr. Bainbridge has kindly written a rather encouraging paper of his attempts with the species, Dr. Amsler has already done so, and as both he and Mr. Temple have *all but* succeeded in breeding the species, we may reasonably hope that, in the not distant future the mystery, re the well-being of this species in captivity may be cleared up.

Having a wide range, there is more than the usual colour variation with this species, and there are two types, of male, the one which we will call the normal, so well known to all, and the other with the rump and abdominal patch golden-ochre, less blue on the forehead, breast washed with smoky-grey, the lower half of tail blackish and the green of the upper surface much darker than that of the normal type; there are also intermediate phases between these two.

There are also several colour forms of the female, which point to the fact that there are similar divergencies, with possibly two distinct types, in both sexes of the Pin-tailed Parrot-Finch.

PIN-TAILED PARROT-FINCH.

By W. A. Bainbridge.

The Pin-tail (Nonpareil) Parrot-Finch according to the experience of most aviculturists is one, if not, the most difficult of seed-eaters to acclimatise; it arrives at the dealers to all outward appearances in the most perfect health and condition, and yet in a few days' time it is dead.

Two years ago I purchased two pairs as far as I could see they were perfect; next day a hen died. I purchased another, then a cock died, again I made up my two pairs, and then they began to die in earnest and I refrained from purchasing any more, and within ten days of my first buying them none were left.

A year ago De Von and Co. had another consignment and I of course went to see them, determined not to buy.

Now the Pintail (Nonpareil) Parrot-Finch is a beautiful bird, to my mind even more beautiful than the Gouldian Finch, and when you get beauty coupled with apparent health one's good intentions are inclined to go to the wall; mine did at any rate, and I bought three pairs.

On arriving home common sense returned and I knew perfectly well that I had to deal with birds that were in all probability in ill health, however well they looked, so decided to treat them as if they were.

These birds are probably brought over in over-crowded and dirty cages, which means that they in all probability eat a lot of filth with their seed that can do them no good, and which would certainly give them stomach trouble, and so for this I treated them.

I at once gave them a mild aperient mixed in warm water for the purpose of taking away at once as much as possible of the matter which would cause the trouble, and then after an hour or so took the drinking water away.

In another two hours, more or less, I returned their water dish, this time adding to it a fairly strong dose of Ditchfield's Tonic Drops; this was given warm, the object to supply a tonic to the system and something to cure the stomach trouble if it existed.

The mixture was renewed, when it got cold for the first few days, when I only gave it every other day and did not trouble to warm it except for the first drink in the morning.

As to food, they had paddy rice *ad. lib.*, a little canary, white and Indian millet, all of which were eaten, and when they would eat them mealworms were given.

The result of all this was that at the end of a week only one had died and I was greatly encouraged and decided to buy some more, one cock and two hens presumably, as I bought young birds which are difficult to sex.

I now had four pairs and of these I lost one more

A House on the Coast Range. *Photo by W. Shore Baily.*

bird, and some time later gave one pair to a friend, which left me with two cocks and three hens.

All these, including the pair I gave away, are still alive and very fit indeed, at least all except one hen, which escaped three months ago, and was never seen again.

Of course, I may have been lucky, but I do think it advisable to start with the idea that your birds are ailing, keep them warm and doctor them accordingly.

I may say, that when spring came round they were put into the aviary, and from then onwards scarcely any paddy rice was eaten, so little in fact that I gave up supplying it; they did quite well without, and were amongst the most conspicuous birds in the aviary, and generally on view, which is more than can be said for the Common Parrot-Finch.

I incline to the belief that there are two kinds of Pintail Parrot-Finches for this reason. I had two certain hens, both had moulted with me, in one the upper tail coverts were bright red, and in the other a sort of dull yellow-orange colour, and again, if the cock figured in our plate in October issue is correct, as to the extent of the blue, mine were quite different, having the blue right down to the red; I may add that I bought one as an adult and one in immature plumage, which is that of the female.

To be continued.

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A Journey Across the Sierras, S. California.

By Wm. Shore Baily.

(*Continued from page* 370).

After having descended about 1,000 feet from the ridge, where we had taken our lunch, we camped at a Mexican rest-house. The canyon here was but little more than one hundred yards wide. On the right of the track the mountain rose steeply for a thousand feet or more, while on the left it dropped twice this distance to the bed of a small stream. There was literally no camping ground, so we had to avail ourselves of the Mexican's barn, and camp there. When buying bread I noticed two nests of the Red-headed Linnet in the creeper round the house, and I also heard a Robin singing close to it. We were aroused early the next morning by the rain rattling on the tin-roof of the barn. While we were thankful it didn't catch us camping in the open, we were very much afraid that it might block the mouth of the canyon, by flooding the stream The Mexicans advised us most strongly not to venture, but the prospect of being bottled up in these cramped surroundings did not appeal to us, so after swallowing a few mouthfuls of food, we got under way. The rain was coming down in torrents, and we were quickly soaked to the skin. The trail, which dropped about 2,000 feet in a couple of miles, zig-zagged down the mountain side, so that at times we could see it directly above as well as directly below us. It was finely engineered and well kept, but the rain had made it slippery, and at one extra steep place our cayuse calmly sat down on its haunches. The writer had to spring out and get a chain lashed round the wheel, before the clever animal would again make a start. At every bend the width of the road is doubled, so as to admit of vehicles passing each other, the rest of the trail being wide enough for one vehicle only. One can well imagine what would happen if a horse getting out of control coming down met another coming up. At last we reached the stream, and were thankful to see that it was not yet much swollen. We knew from experience that we should have to cross it over seventy times before we got clear of the mountains. As it is normally very shallow, this is usually a small matter. But a storm in the mountains raises the water extraordinarily quickly and we had noticed on a previous trip driftwood, etc., quite ten feet above the present level of the stream. It was evident that there was no time to be lost, so, as the gradient was not too steep, we put our old mare to her best speed. The rain still continued to come down in sheets, so we took it in turns to drive, as our hands got numbed with the cold and careful driving was essential. Each time we crossed the stream we found the water deeper, and at last it was impossible to strike the crossing at exactly the right place. Time after time we had to jump out into water now waist deep and practically lift the waggon over. At one place the walls of the canyon were not fifty yards apart, and we crossed here the old mare half swimming, and the, bed of the waggon afloat. A little further on the bed of the stream widened out again and the water was a little shallower.

Here we struck a small mining camp. They were running an adit into the mountain side, in the hope of striking gold-bearing rock in payable quantities. They assured us that we shouldn't get through, and wanted us to camp with them for a day or two, but we were not to be persuaded and pushed steadily on. At last we reached the mouth of the pass, after three hours of the hardest work either of us had done for many a long day. Had we started only an hour later we could not possibly have got through, and as these mountain streams will sometimes bring down boulders as big as cart wheels, and so block the trail, we might easily have been delayed for several days; no pleasing situation when one's stock of provisions is limited. The valley here was about half a mile wide, and was flooded from side to side with water a few inches deep through which we splashed gaily. The sun was now shining, the rain having ceased in the valley, and we found its heat on our backs particularly comforting. On many of the half submerged bushes that we passed, various ground birds were resting, their nests having been washed away by the flood. Snakes of various kinds were also seen drying themselves in the sun. Hawks were everywhere skimming over the water; no doubt finding numerous small mammals flooded out of their burrows. After another mile or two we reached higher ground and left the river behind us. About mid-day we arrived at Newhall and camped under a fine Oak just outside the town, immediately spreading out our goods and chattels in the sun to dry, everything having been thoroughly soaked.

Newhall is a little one-horse town, celebrated for its tunnel through the mountains, through which the C.P.R. passes on its way from 'Frisco to Los Angeles, It is surrounded on three sides by high mountains, but to the west the Santa Clara Valley runs down to the sea, some sixty miles distant. An awfully hot place in the summer, I should think.

There were some very fine Oaks in the Valley and in the mountains near by some decent Pines. After a good square meal I left our things to dry in the sun and took a stroll round with the gun and dog. Birds were numerous. In a Date Palm a pair of White-eyed Grackles (*Quiscalus quiscalus agelaeus*) were nesting. Plucky birds these, and they flew about the head of my dog, until we left the vicinity of their nest. They are not very common in California. I have only seen them in and about towns, and then only a pair or two of them together. On our walk we saw a good many Pigeons feeding in the Oaks and shot a couple. We also saw Quail, Doves and Robins in fair numbers. An Oriole's nest was seen hanging from a fruit tree in a garden, and a Humming Bird passed too quickly to be identified. This night we were awakened by the screeching of a Mountain Lion, quite close to our camp. Their cry has been likened to the scream of a woman. I can't say whether this is so, but I can vouch for its being an extremely unpleasant sound. As it started all the dogs barking, sleep was out of the question, until it had passed on. Deer, which are its principal food, are very numerous in this part of California, so these Lions are fairly common. They occasionally kill young stock, and I remember one summer at Santa Monica securing one from a rancher, who had poisoned it, after it had killed one of his colts. When skinning it I was particularly struck by the size of its fore-arms, and by the weight of its head. I don't suppose that the animal weighed more than a large English Mastiff, but its limbs seemed to me much more powerful. They are cowardly creatures and I never heard of anyone being attacked by one of them.

(*To be continued*).

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The First Year of a Sussex Aviary.

By E. R. and N. S. Lucas.

In this our first contribution to *Bird Notes* we should like to make it quite clear to any possible readers that we are beginners and have no wonders of aviculture to narrate. We write in response to the frequent appeals for copy from our genial editor, and like the pianist in the well known story "We are doing our best."

Our aviary for the past year has been an unheated one, though for the coming winter we have installed an oil and water heating apparatus of the same type as that described by Mr. Bainbridge in a previous number of this magazine.

The shelter is an ordinary matchboarded shed, with glass windows protected with wire netting in front, and, with a sliding door connecting it with the flight. The size is 10ft. x 5ft. x 6ft. 6in. The floor is concrete. The flight consists of a space 20ft. x 10ft. x 7ft., the wire netting being carried down, and out, into a trench 18ins. deep and 12ins. wide, which has been filled in with clinker to serve as a drain and connected with a clinker-filled pit. In spite of this, our flight was somewhat of a quagmire by the end of the winter and we have now installed a pipe drain leading the water right off. The flight has been planted with a bamboo, laurel, rhododendron, and hawthorn, and we are about to add some rambler roses and a box bush. The water supply is primitive, consisting of a shallow cement basin filled daily from a can.

It is perhaps important to add that the aviary is in north-east Sussex and on clay of the very worst.

It was with great excitement that in August, 1913, we installed the following birds, one pair of each: Zebra Finches, Cordon Bleus, Magpie Mannikins, Green Singing-finches, Spice Finches, Orange-cheeked Waxbills, Bengalese, and Red Avadavats.

With the lack of experience of beginners we left the sliding door of the shelter open at night too late in the year with the result that there were several *post mortems*, done by one of us mostly with verdicts of congestion of the lungs and nephritis. After November 6th we closed the door and only had two more losses (and one of these was due to a fatty liver) in spite of a temperature of 20deg. F. for a few nights in the shelter.

It was during this severe weather that our Mannikins first set up house-keeping and produced five young which left the nest on the very coldest day and paid the extreme penalty for their rashness. In the spring we made good our losses and bought in addition the following birds: Bib Finches, Blue-breasted Waxbills, Red-billed Weavers, Yellow-rumped Serins, Firefinches, Cuban Finches, White-throated and Red-headed Finches, and Zebra Waxbills. These were all put into the aviary early in May and were followed early in July by a pair of Black-headed Gouldian Finches. These last had been kept in a cage for six weeks before being turned out.

By now it is the 1st of November and we have only lost the Cordon Bleus which do not seem to do well here, and the Blue-breasted Waxbills.

As the summer came on, we anxiously watched for signs of domesticity, and in due time were rewarded by the Magpie Mannikins who hatched six and successfully reared four young. Altogether the hen Mannikin has laid forty eggs and has only fully reared six young, almost entirely due to a desire to start a new nest before the last young were mature, or even ready to leave the nest. Still, what we should have done with forty Mannikins we do not know, so perhaps it is all for the best.

The next to follow suit were the Cuban Finches, who true to their natural state selected the bamboo bush, and built in it a domed nest of hay in which they deposited four eggs. All these hatched and three young left the nest, the fourth being adandoned by its parents to starvation. The sexes of these three which have reached the adult state are one male and two females. Of all the birds we have had we are fondest of the Cubans. Their cheerful call and bright perky ways make them peculiarly fascinating; and they alone became tame enough to take a mealworm from our fingers.

Our next episode was a disappointment. The Blue-breasted Waxbills nested, five eggs appeared, the hen sat on them and nothing happened; they all proved clear. Not long afterwards first one and then the other shuffled off this mortal coil.

As a contrast to this, our next event was a triumph. The Firefinches made a nest in a cardboard box, which had once contained note paper. They laid three eggs from which two young were hatched. Both the young were successfully reared and appear to be hens.

The Red-headed Finches were disappointing. They nested several times but the best result was one young, which lived about three days. On the other occasions the eggs, which were never more than three in number, were either addled or infertile.

The Zebra Finches nested in a coco-nut husk, and first produced four young, two of which, both cocks, survived. A second brood of four was more satisfactory, all four living and doing well, the sexes in this case being equally divided. We noticed that the parents laid eggs while the first brood were still in the nest. The elder brothers remained there three weeks and emerged nearly self-supporting, leaving the parents free to attend to the rapidly following second brood.

The Bib Finches laid many infertile eggs, only one young being hatched, which lived a day, and a second clutch of Cuban eggs was abandoned, apparently, as too much trouble.

Very early in August the Gouldian Finches became extremely keen on a basket-nest, chasing other birds away with great vigour. The cock danced before the hen with a great and passionate fervour. They lined the nest with hay -- and there the story ends. Nothing more happened. This is the end of the breeding. It might have been better! It might have been worse!

As regards diet we give our birds millet (spray and white), rape, and a little hemp in winter. Also we give them plenty of seeding grass and during the breeding season fresh and dried ants' eggs, insectile food, and a few mealworms. Besides which, they are able to find plenty of insects in the flight.

Before we end we must put on record the great care and attention of one of our gardeners, E. P. Card, who has looked after our aviary with as much anxious thought and care as though it had been filled with Birds of Paradise and Kagus.

◆

Birds of the Jhelum District and an Ornithological Diary from the Punjab.

By H. Whistler, I.P., M.B.O.U.

Continued from page 381.

August 16.—Visited a small and overgrown jheel where a pair of Sarus Cranes (*Grus antigone*) were supposed to be nesting; as they had been seen frequenting a small island in the middle of it, whose base as also much of the jheel was covered with great clumps of Pampas grass. After wading about the shallower parts of the jheel, I reached the island. Here my attention was first attracted by the agitation of an Ashy Wren-Warbler (*Prinia socialis*) which proved to have fledged young, one of which I caught and released after examination. I then walked across the island, which although thickly grown was so small that I concluded that the Cranes could not be nesting there or they would have been disturbed by my approach. Seeing a pair of Water-hens (*Gallinula chloropus*), and some Pheasant-tailed Jacanas (*Hydrophasianus chirurgus*) in a patch of open water by the island I started wading again to see if they were nesting. I had only got a few yards from the island when a man on the bank shouted that a Crane had risen silently behind my back from the bushes at the base of the island, and I at once went back to the spot where I found the nest. This consisted merely of a small armful of dry grass spread carelessly in a hollow formed probably by the digging out of a jackal's earth in the bank of the island. On the grass a few inches apart lay the two large white eggs, which were left undisturbed. I then turned my attention again to the Jacanas. The water here was fairly open, studded with a few patches of growth ; it was deep enough to come half-way up my thighs and was full of a clinging moss-like weed, which made wading very unpleasant. However, failing to find a nest, I came out of the jheel and was going away when a Jacana went to the part where I had been wading and after stalking over the weeds settled down apparently on the surface of the water close by a tuft, as if on a nest. I entered the water again and with some difficulty found the nest. It was difficult to spot—the three olive-brown eggs in a slight nest of weeds on the surface of the weedy water being very inconspicuous. The water was visible in the bottom of the nest, and although the eggs were not touching it, they must have done so as soon as the bird sat down.

Other interesting birds noted at the jheel were an immature Cormorant (*Phalacrocorax carbo*), a Pigmy Cormorant (*P. javanicus*), a Marsh Harrier (*Circus aeruginosus*) and some Avadavats (*Sporaeginthus amandava*).

Also attracted by the fuss that some Coucals (*Centropus sinensis*) were making, I found that they had a nest containing dead naked young in a clump of Pampas Grass. Two eggs of Little Brown Dove (*Turtur cambaiensis*) and six eggs of *Franklinia buchanani* also found.

A White-necked Stork (*Dissura episcopus*) and some Nightjars were seen on the road to the jheel.

August 17.—Found a nest of the Large Grey Babbler (*Argya malcolmi*) containing young ready to fly ; it was situated about 15 feet from the ground in a small Kikur tree.

A Black-winged Kite (*Elanus caeruleus*) and some Ashy-crowned Finch-Larks (*Pyrrhulauda grisea*) seen.

August 18.—Visited the jungle where Nightjars were found to be swarming on 26th July, but could find none there-to-day.

Many Blue-checked Bee-eaters (*Merops persicus*) noted. I shot a Cuckoo (*Cuculus canorus*) which was flying about in low bush jungle and found it so fat that I could hardly preserve the skin; it was, of course, on migration.

A single Rain Quail (*Coturnix coromandelicus*) heard —they are much less noticeable than formerly.

August 19.—The Rose-coloured Pastors (*Pastor roseus*) are now very numerous in the evening about half a mile from my bungalow in a spot where they collect in large flocks to roost. These flocks fly about a good deal before settling for the night.

August 20.—Noted the first Willow-Wren of the Autumn migrations. I shot it and found that it was a specimen of the Large-crowned Willow-Warbler (*Phylloscopus occipitalis*).

August 22.—My orderly brought me a young Pied Mynah (*Sturnopastor contra*) which he had caught—one of three young birds that flew out of a nest examined. I put it into a cage containing an older bird of the same species, and in a very short time it learnt to feed itself.

A Green Sandpiper (*Totanus ochropus*) with a broken wing caught in a ditch by my house.

August 23.—One of the common sounds of the countryside now is the scolding note of the Bay-backed Shrike (*Lanius vittatus*) objecting to one's approach to the neighbourhood of her newly-fledged brood; all over the place may be met these young Shrikes with their parents in anxious attendance. To-day I met also with a brood of young Rufous-backed Shrikes (*Lanius erythronotus*)—a less common breeding species in these parts.

Several Buntings were noted flying overhead in small parties; they looked to me like Red-headed Buntings (*Emberiza luteola*) but a solitary bird that I shot off a tree proved to be a male Black-headed Bunting (*Emberiza melanocephala*); both species of course are on migration. Shot Blyth's Reed-Warbler (*Acrocephalus dumetorum*) and saw what were probably others—these are the first I have noted on this autumn migration. Another migrant met with was a Grey Wagtail (*Motacilla melanope*).

A male Lesser Floriken (*Sypheotis auritus*) and many Cuckoos (*Cuculus canorus*) were reported as seen on the Government Cattle Farm.

August 24.—I was walking along a scarcely defined path that ran through a field of thorn bushes and rich grazing grass when a small Quail rose with a whirr at my feet; something about it seemed to suggest a nest, so I started to search in the grass by the path, and in a few seconds came on the eggs. They were lying about a foot from the path in a slight hollow, in which were a few pieces of both green and dry grass. The nest with its protectively coloured eggs was very hard to see indeed, although the grass which was a foot high and coarsely luxuriant was not very thick. The eggs coincided well with the dark earth. As I was not certain of the species of Quail I tried to obtain the bird but could not find her again, nor did she return to the nest before dark. However, next day I found her on the nest, and although I missed her as she rose, I was able to mark the direction of her flight, and after some search flushed her again. It proved to be the Little Button Quail (*Turnix dussumieri*)—a species that is not uncommon here. The four eggs were fresh, and in the birds' ovary were a large soft egg nearly full sized and a smaller one the size of a buckshot.

These eggs are dull greenish white in colour, speckled all over with brown, yellowish brown, and dark brown. There are in addition small irregular blotches of dull blue-black ink colour, and dark brown, which tend to zone towards the broader ends of the eggs.

Two eggs measure 24.5 x 19.5 m.m. ,and the other two 24.5 x 20 mm.

Not far from the Quail's nest was a nest with 5 moderately incubated eggs of the Rufous-fronted Wren-Warbler (*Franklinia buchanani*). The nest was a broad upright oval, measuring roughly 4 inches by $3\frac{1}{4}$, with the entrance situated near the top on one side, there being a slight vestige of a porch. The materials of which it was composed were fine grass stems and heads, mixed with a few coarse pieces of grass, the whole being held together and lightly covered inside and out with pieces of white cotton-like down. There was no other lining. I have occasionally met with such nests in construction and noted that the outline of the nest is always lightly sketched in first by a delicate network of these downy threads.

This nest was situated about a foot from the ground in a thorn bough which had been cut down and left on the ground, the grass having grown up through it—a very favourite site for these tiny Warblers.

August 25.—Saw 3 full grown Grey Partridges (*Francolinus pondicerianus*) sitting up at the top of a thorn tree with some Babblers.

Another brood of young Rufous-backed Shrikes (*Lanius erythronotus*) seen: also a Green Sandpiper.

August 26. A Pea-Hen was seen escorting a single chick about a day old in my compound, so the chick was caught and given to a hen to rear. It was quite fearless.

August 27.—A pair of Blue Rock Doves (*Columba intermedia*) have been haunting my bungalow all the summer and have already reared two young ones which were apparently driven away. As they took latterly to making themselves a nuisance by roosting in the drawing-room I removed their second clutch of two eggs, which were laid in a bulky nest of grass and twigs on the cornice of the verandah. These two eggs both measured 38.5 x 27.5 mm. However they started building a new nest at once; this nest, however, would not remain on the ledge chosen, which was too narrow, and while the cock was striving with it, the hen made a slight nest for herself in another part of the verandah, which contained 2 eggs when examined on 11th September.

August 29.—Examined a nest of the Silverbill or White-throated Munia (*Uroloncha malabarica*), which was an egg-shaped structure of flowering grasses, with the entrance at one end, placed horizontally in a thorn bush. It contained fresh eggs, all of which but one were broken up and partly eaten, possibly by ants. Two incubated eggs in a nest of the Indian Ring Dove (*Turtur risorius*) which was situated only 3 feet from the ground in a thorn bush. The Red-headed Bunting (*Emberiza luteola*) continues very numerous; parties may be seen in every direction. A few Black-headed Buntings (*E. melanocephala*) are also about. A Nightjar seen.

August 30. Three Lugger Falcons (*Falco jugger*) were observed flying together to my house in the early morning.

August 31.—The three Luggers again appeared in the early morning.

I saw a Pied-crested Cuckoo (*Coccystes jacobinus*) being mobbed by several Jungle Babblers (*Crateropus canorus*)—one of the species on which it is parasitic.

A male Pied Bush-chat (*Pratincola caprata*), a female Pied Wheatear (*Saxicola picta*) and another Wheatear (perhaps *S. oenanthe*) noted.

Two Green Sandpipers, a White Ibis, and a Nightjar seen.

SUMMARY OF THE MONTH.

While a certain amount of nesting has been going on the month is chiefly remarkable for the fact that the autumn migrations are now fully started. Some of our summer visitors have commenced to go and their place has been more than filled by the numbers of passage migrants, which form one of the features of the month; as well as the passage migrants but in less numbers have appeared some of the winter visitors.

Those birds, such as *Coturnix coromandelica* and *Coccystes jacobinus* which are Rains visitors only (for breeding purposes) while still being in evidence have certainly decreased greatly in numbers.

As examples of the passage migrant which has occurred in numbers throughout the month may be cited *Pastor roseus, Emberiza* *luteola*, and the Warblers of the genus *Hypolais*. Passage migrants that are more restricted in numbers include *Cuculus canorus* and *Motacilla melanope*

Winter visitors that have commenced to arrive include *Totanus hypoleucus, Circus aeruginosus* and genus *Saxicola*.

CORRIGENDA.

Page 237, line 28 for "migratory" read *migrating* (May 4th).
,, 237, line 32 for "fitting" read *filthy* (May, 5th).
,, 239, line 9 for "evenings" read *evening* (May 13th).
,, 239, line 23 for "*capirata*" read *caprata* (May 14th).
,, 240, lines 1 and 2 for "Sykes' Tree-Warbler (*Hypolais rama*)" read Booted Tree-Warbler (*Hypolais caligata*) (May 18).
,, 243 line 14 insert May 31st.
,, 381 line 8 for "*Butastin*" read *Butastur*.

Correspondence.

TRI-COLOURED PARROT-FINCH.

Sir.—I have a cock Tri-coloured Parrot-Finch which formerly belonged to the Hon. Mrs. Bampfylde; I find him much easier to keep in health than the Common Parrot-Finch; in fact he never ails.

I have long endeavoured to find him a mate as I feel sure he would breed. In my aviary he has made friends with a cock Avadavat and the two sit side by side and are generally together. He chiefly eats spray millet and a mealworm or two. A nice little lot of Zebra (5) left the nest last week.

(Miss) ETHEL F. CHAWNER.

HYBRIDS.

Sir,—Some time ago I wrote that my Grey Singingfinch × Linnet hybrid had paired with my hen Linnet, and that two young had been fully reared.

Now that the young ones have come into adult plumage I find I was mistaken, and that they are the offspring of a St. Helena Seed-Eater and the Linnet.

I remember that in the spring the Seed-Eater was very attentive to the Linnet, but he died before any young were hatched, and she took up with the Grey Singing-Finch × Linnet cock, who certainly paired with her, and assisted her to rear the young. I was away from home while the nest was being built, and did not find it until the young were some days old.

Three young birds left the nest, but one was weakly and soon died. The other two show their parentage plainly and one (a cock) is quite handsome. He is in size and build a Seed-eater, has a brown breast, faintly washed with yellow, as is his head, back brown like the

Linnet's and bright yellow rump. The wings and tail are like the Linnet. The other bird, which, I think, is a hen, is browner and fuller in every way, but about the same size.

It is curious that the Singing-Finch × Linnet should have fathered them. I saw him feed them frequently.

(Miss) ETHEL F. CHAWNER.

HYBRID BULBULS.

Sir.—Just a few lines to tell you that the Bulbul Hybrids have moulted, and the largest is beginning to look quite a fine bird, and very red at the vent; the others do not show it very much yet. They still look more like the father; the largest sings (?) quite well and has called a lot from the day it left the nest. I hope to be able to show one, but it is most difficult to keep them in good feather in a cage, as they are wild birds and will flutter on the wires.

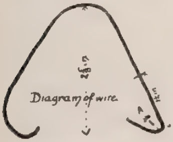
I saw about 20 or more Long-tailed Tits go over here on October 8th. (Miss) ALFREDA B. SMYTH.

1/11/'14.

AN EXTRAORDINARY ACCIDENT.

Sir,—I lost a fine Yellow Budgerigar cock in such an extraordinary manner; one would never think such a thing could happen.

I have had six fine young Budgerigars caged up for many weeks to try and sell them. The cage was usually hung against the wall by a wire (see quarter size diagram), but owing to mice it was suspended from the roof and in consequence the wire hung loose at the back of the cage, with the hooked ends inside. By some means, the hook of wire got down the bird's throat 1¼ in., not measuring round the hook (see cross-line at right of of diagram); the distance across the gap between tip of hook and wire (see A on diagram), is ⅝ in. How the bird swallowed the hooked end is a marvel, when one considers the small throat of a Budgerigar. It was right down the throat, the tip of the hook causing the skin to project (the skin was not pierced) well below the base of the lower mandible.



Ore, Hastings. (Miss) L. STURTON JOHNSON.

ACCIDENTS TO WILD BIRDS.

Sir,—I was down the field with the dogs when I saw a fine cock Chaffinch hanging by the wing at the top of the thorn fence; he had not been dead long. A large thorn had run right through the wing, near the pinion joint, and two or three stiff twigs of the thorn bush were so interlaced just above the bird's head as to prevent him from flying upwards and releasing his wing.

Ore, Hastings. (Miss) L. STURTON JOHNSON.

Editorial.

All general notes must be omitted owing to exigencies of indices and must be confined to a few brief notes of the L.C.B.A. Show, and an equally brief report of the Club Year.

L.C.B.A. Show. The 26th annual Show of this Club was held at the Horticultural Hall on November 26th to 28th, and from the standpoint of entries and quality was a great success, especially so when we consider the present national crisis. The Foreign section, which is, of course, the section which appeals to our readers, was allocated 32 open classes, and two confined to members of L.C.B.A. only; the former secured 306 entries, equivalent to an average of 9.5 per class, while the latter secured but 13 entrants. The bulk of the entries came from members of our club and we must certainly congratulate them on the variety, beauty and excellence of their exhibits. Many well known names were absent, but there were new ones to fill the gap, among whom we notice Dr. Lovell-Keays, his thirteen entries securing eleven awards and several specials.

Of the feathered exquisites staged, of course, the palm must be given to Mr. Ezra's Humming Birds, his success in keeping these birds is indeed a notable one and stands unrivalled in this country; both are cage moulted, one having been in captivity nearly nine months, and the other nearly six; and, we congratulate our member on his success, the completeness of which, needs no other testimony than the birds' condition.

The Sunbirds were a gorgeous array, all in exquisite form, with Sugarbirds and Tanagers but little behind in the gorgeous and iridescent hues of their garments.

The following is a very rough summary:

44 different species were staged in the Parrot classes.

5 different species were staged in the Dove, Pigeon, and Quail class.

102 different species were staged in all other classes.

When we consider that among these were included the two Humming Birds, a King Bird of Paradise, five species of rare Sunbirds, and some six or more other species new to the Show Bench, sufficient has been written to indicate that the Foreign Section of this Show, in spite of the times, is indeed a notable one.

We must, however, reserve the list of awards and full reference to the various exhibits to our next issue, merely in conclusion stating that the Hybrid Class was most successful, the following being staged.

Red-headed × Ribbon Finch.
Greenfinch × Himalayan Siskin.
Spice Finch × Bib Finch.
Silverbill × Bengalese.
Red-vented × Red-eared Bulbul.
Tri-coloured Mannikin × Bengalese.
Magpie Mannikin × Bengalese.

We hope to illustrate and describe the above interesting Hybrids in our next issue.

We much regretted to note that the attendance was very much below average, and fear, that notwithstanding the worthy source to which any profits were to go, that the Show must result in a financial loss to its promoters.

Report: We do not intend occupying space here, as we feel the Club Journal speaks for itself as to the progress of the Club, and we are pleased once more to be in a position to report progress. The net gain cannot be computed at present. there have been some of our members who have joined the "great majority," others have retired from various causes, but the number is not large, and we have the pleasure to state that during the year we have enrolled 52 new members.

The coming year is likely to be a difficult one for all such societies—as near as possible we shall proceed on present lines, keenly, we hope, on the alert to improve and advance as opportunity presents itself.

The present Vol. runs into over 400 pages, irrespective of indices and an 80 page inset; we can hardly hope to reach such bulk next year, but, we are assured that the members will all stand by us, and by supplementing their subscriptions by such donations as they feel the critical times justify, prevent any drastic retrenchment.

During the year, results in some aviaries have been poor, in others quite good, local conditions being possibly the governing factor in such cases. Several species have been bred for the first time in captivity, and numerous interesting hybrids have been similarly brought into existence; to enumerate details here would be but to repeat what we have already published.

We congratulate the Club on a successful year's work and tender thanks to all who have contributed in any way thereto, especially those who have served in office and on committees.

Book Notices and Reviews.

Bird Life. By Chas. Reid. Cloth. Large Post 12mo., with over 100 illustrations. London, T. N. Foulis, Great Russell Street, W.C.

This little work is exquisitely got up, printed on art paper, and with each of its 105 pages adorned with a photo-reproduction of birds, their young, and nests. A concise description of each species figured appears below each illustration. We hope to give a fuller notice in next issue. It should form an admirable gift book for young people, and might well accompany all nature lovers in their peregrinations along the countryside. Its size is but 5in. × 5½in., comfortably fitting an ordinary side pocket.

Birds of the Indian Hills. By Douglas Dewar, London. J. Lane, The Bodley Head. Cloth. Large Post 8vo., 6s. net.

We regret space will not permit a review in this issue, but most of our readers are acquainted with their fellow member's previous works, and the present is of fully as great interest as any that have gone before. To the aviculturalist Mr. Dewar's graphic descriptions of the habitat and nests, of the Birds of the Hills, should supply many useful hints as to accommodation, etc., required for the occupants of his aviaries. We can cordially commend this book, either as a gift book from one bird-lover to another, or to adorn one's own book-shelf.

Post Mortem Reports.

Sunbird. (Miss Bousfield, Bournemouth). The cause of death was fatty degeneration of liver with resultant hæmorrhage.

Gouldian Finch (♂). (B. C. Thomasset, Ashmansworth). Cause of death, hæmorrhage of brain.

H. GRAY, M.R.C.V.S.

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JANUARY, 1914

The Foreign Bird Club.

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Adams, A. W., 118, Northampton Road, Market Harborough. (May, 1912).

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Allan, J. W., Bondgate, Alnwick. (April, 1911).

Almond, The Rev. F., Branxholme House, Lincoln Road, Peterborough. (Feb., 1906). Dormant.

Ames, Mrs. Hobart, North Easton, Massachusetts, U.S.A. (March, 1913).

Amsler, Dr. Maurice, Eton Court House, High Street, Eton, Windsor. (March, 1909).

Andrews, F. J., Gordon House, Woodbridge. (Dec., 1911).

Anningson, Mrs., Walt-ham-sal, Barton Road, Cambridge. (Dec., 1910).

Appleby, K. A., Post Office of India, Amritsar, Punjab, India. (Oct., 1910).

Armstein, Mark, 30, Grand Parade, Cork. (March, 1906).

Armstrong, Chas., The Grove, Cambridge. (Aug., 1913).

Arnott, Peter, 37a, Grange Road, Alloa. (Dec., 1913).

Arrighi, L. J., Harrison View, Watson Crescent, Edinburgh. (Mar., 1908).

Arthur C. P., Hillcrest, Melksham. (Feb., 1913).

Astley. H. D., M.A., F.Z.S., M.B.O.U., Brinsop Court, Hereford (Dec., 1909).

Attwell, Harold E., Cassia Grove, Halfway Tree, P.O., Kingston, Jamaica, B.W.I. (March, 1910).

Austin, W. E., Wandsworth Public Libraries, Allfarthing Lane, Wandsworth, London, S.W. (April, 1909).

Baddeley, A., 21, Derby Street, Hulme, Manchester. (July, 1912).

Baily, W. Shore, Boyers House, Westbury, Wilts. (June, 1909.)

Bainbridge, W. A., Hazlewood, Thorpe, Chertsey. (Sept., 1912).

Baker, Miss M. E., The Elms, Mount Sorrel, Loughborough. (Sept., 1902).

Bamford, Wm., The Coppice, Werneth, Oldham. (June, 1904).

Bampfylde, The Hon. Mrs., Court Hall, North Molton, North Devon. (July, 1911).

Barlow-Massicks, Mrs. C., The Mount, Rotherham. (Nov., 1911.)

Barnaby, Miss Alison, Oak Lodge, Bitterne, Southampton. (Aug., 1912).

Barros Americo de, 63, rua Victoria, Sao-Paulo, Brazil. (June, 1912).

Baxby, William, 6, Chesterfield Road, Dronfield, Sheffield. (June, 1910).

Beaty, S., Strathnarn, Elm Grove, Alderley Edge, Manchester. (Mar., 1908).

Beazor, Rev. J. T. A. Lovell, 12, Hope Drive, The Park, Nottingham. (April, 1911).

Beebe, C. W., Curator of Ornithology, New York Zoological Park, New York City, U.S.A. (July, 1911).

Bliss, H. E., Church Street, Middleburg, Cape Colony, S. Africa. (Jan., 1903.)

Boscawen, The Hon. Vere D., 2, St. James' Square, London, S.W. (January, 1911).

Bonnick, Mrs., Belmont, East Hoathly, Halland, Sussex. (Nov., 1911).

Botting, H., Mountside, Harrow Road, Dorking. (Dec., 1908).

Bourke, Hon. Gwendolen, Hitcham Vale, Taplow, Maidenhead, and 75 Gloucester Place, Portman Square, London, W. (Dec., 1909).

Bousfield, Miss M., Avon Court, Southbourne Road, Bournemouth. (Jan., 1908).

Boyd, Harold, Box 374, Ketowna, Brit. Columbia, Canada. (April, 1903).

Branfoot, B., 41, Cromwell Road, Grimsby. (Nov., 1912).

Bright, R. E., Sunnybank, Coggeshall, Essex. (March, 1910).

Bright, Herbert, Lynton, Eaton Road, Cressington Park, Liverpool. (Oct., 1911).

Bromwich, Miss Vera. (Present address unknown).

Brook, E. J., F.Z.S., Hoddam Castle, Ecclefechan. (Mar., 1908).

Brotherston, G. W., 23, Jeffrey Street, Edinburgh. (August, 1909).

Brown, Mrs. C., Seton Lodge, Beacon Road, Henleaze, Westbury-on-Trym, Bristol. (May, 1910).

Browning, W. H., 16, Cooper Square, New York, U.S.A. (February, 1910).

Browne, Capt. A. E., Belmont, Murree, Punjab, India. (March, 1912).

Bruce, Miss A., 42, Hill Street, Berkeley Square, London, W. (Mar., 1909).

Bufton, Reginald P., Caerhyn, Llandrindod Wells. (Jan., 1913).

Bull, F. W., Bude, Strathearn Road, Sutton, Surrey. (June, 1912).

Burnham, John B., President A.G.P. and P. Ass., Trinity Buildings, 111, Broadway, New York, U.S.A. (Mar., 1913).

Bush, W., The County Bor. of Newport School of Art, Clarence Street, Newport, Mon. (May, 1909).

Camps, H. T. T., F.Z.S., Linden House, Haddenham, Ely. (Orig. Mem.).

Capern, F., Avenue House, Cotham Park, Bristol. (October, 1907).

Carr, J. T., Blythewood, Deramere Drive, Malone Road, Belfast. (Sept., 1912).

Carr, Richardson, Home Farm, Tring, Herts. (June, 1913).

Cartwright, Miss E., Bretton Lodge, Wakefield. (January, 1912).

Cecil, Lord William, 23, Queen's Gate Gardens, London, S.W. (November, 1909).

Chaplin, E. W., The Firs, Great Amwell, Ware. (Sept., 1903).

Chawner Miss E. F., Forest Bank, Lyndhurst, Hants. (July, 1910).

Christie Mrs. G., Newton House, Elgin. January, 1913).

Clare, Miss Lydia, The Hollies, 194, Coombe Lane, Wimbledon, London, S.W. (March, 1910).

Clarke, S., Inces, Scaynes Hill, Hayward's Heath. (August, 1911).

Clarke, Leigh, Tower Hirst, Stoke Bishop, Bristol. (Feb., 1911).

Clifton, Lord, Cobham Hall, Gravesend. (October, 1905).

Colton R., 9 Birkendale Road, Sheffield. (Feb., 1913).

Connell, Mrs. Knatchbull, The Orchard, Brockenhurst, Hants. (July, 1912).

Conway-Gordon, Miss V., Longley House, Rochester. (October, 1906).

Constable, Archibald J., The Lodge, Littlehampton. (Mar.,, 1913).

Constable, Rev. W. J., Uppingham. (February, 1912).

Cook, W., 24, Hyde Park Gardens, London, W. (March, 1909).

Corbet Sir R. J., Bt., Acton Reynold, Shrewsbury. (April, 1911).

Crisp, R. L., 50, Elm Park Road, Chelsea, London, S.W. (Feb., 1909).

Croker, Chas., E., Burrow Inche, Lower Bourne, Farnham. (Oct., 1911).

Cronkshaw, J., 193, Manchester Street, Accrington. (Nov., 1901).

Cross, R., Northumberland Park, Tottenham, London, N. (Jan., 1914)

Croysdale, Mrs. B., Hawke House, Sunbury-on-Thames. (Jan., 1908).

Curry, H. L., Lambolle Lodge, Littlehampton. (July, 1912).

Currie, J., 128, Willowbrae Road, Edinburgh. (Aug., 1913).

Curzon, J. W., Temperance Hotel, opp. Central Station, Lowestoft. (February, 1912).

Cushny, Charles, c/o. Messrs. Neish, Howell, and Haldane, 47, Watling Street, St. Paul's, E.C. (Orig. Mem.).

Cussons, A. T., Kersal Vale Works, Manchester. (May, 1913).

Darrell, Dr. H. W., Adelaide House, All Saints' Green, Norwich. (September, 1908).

Davidson, Mrs., Yew Tree Cottage, Bitterne, Southampton. (April, 1911).

Davies, Mrs. M. H., Daresbury Hall, Nr. Warrington. (Jan., 1914).

Dawson-Smith, F., Nash Rectory, Stony Stratford, Bucks. (Mar., 1912).

Dell, C. E., 12, High Street, Harlesden, London, N.W. (Jan., 1914).

Dennis, Mrs. Harold, St. Leonard's Park, Horsham. (Jan., 1904).

Dewar, D., I.C.S., F.Z.S., Pilibhit, U.P., India.

Dewar, J. F., 2, St. Patrick's Square, Edinburgh. (Orig. Mem.).

De Yarburg-Bateson, The Hon. Lilla, Heslington, York. (June, 1903).

Dickens. Mrs. Amy, J., Julian Hill, Weybridge, Surrey. (Nov., 1913).

Dobbie, J., Waverley Works, Leith, Edinburgh. (April, 1906).

Drabble, J. W., 29 Holme Lane, Hillsborough, Sheffield. (April, 1913).

Drabble, W. L., 29 Holme Lane, Hillsborough, Sheffield. (April, 1913).

Drummond, Miss, Mains of Megginch, Errol, Perthshire. (Nov., 1907).

Dunleath, The Lady, Ballywalter Park, Ballywalter, co. Down. (November, 1901).

Dutton, The Hon. and Rev. Canon, Bibury Vicarage, Fairford, Glos. (May, 1906).

Dyott, R. A., Freeford, Lichfield. (Nov., 1912).

Ebrill, Wm., 14, Victoria Terrace, Limerick. (April, 1906).

Eccles, Miss A. S., The Glade, Ditton Hill, Surbiton, Surrey. (Jan., 1912).

Edmunds, W., Coombe Farm, Langton Matravers, Wareham. (Nov. 1909).

Elms, E. F. M., Rosebank Cottage, Carshalton Road, Sutton, Surrey. (June, 1910).

Ezra, A., 110, Mount Street, Grosvenor Square, London. (Jan. 1911).

Ezra, D., 3, Kyd Street, Calcutta, India, (Aug.; 1912).

Fasey, William, R., The Oaks, Holly Bush Hill, Snaresbrook, N.E. (Jan., 1903).

Faux, E. R., Headfield, Jew's Walk, Sydenham, London, S.E. (Oct.; 1911).

Ferrar, B. B., M.D., F.Z.S., Superintendent, The Royal Zoological Society's Gardens, Phœnix Park, Dublin. (Dec., 1912).

Findeisen, A. G., Hallow Dene, Torquay. (June, 1913).

Firth, W. H., 1, Agnes Road, Northampton. (May, 1913).

Fisher, W. H., The Bush Hotel, Farnham. (May, 1908).

Fisher-Rowe, H. M., St. Leonard's Grange, Beaulieu, Brockenhurst, Hants., (Jan., 1911).

Flannery, M. J., Barrack Street, Nenagh. (Jan., 1909).

Fletcher, Geo., 19, Peveral Road, Sheffield. (April, 1911).

Flower, Capt., S. S., F.Z.S., M.B.O.U., Keedah House, Zoological Gardens, Gizeh, Egypt. (March, 1909).

Flower, Mrs. Stanley, Longfield, Tring, Herts. (July, 1910).

Fockelmann, Herr August, Handels-Tierpark, Hamburg-Grossborstel, Niendorferweg. (Dec., 1912).

Fordred, Ernest, E., Wychmont, Olton, Acocks Green, Birmingham. (Jan., 1913).

Foster, Miss E. M., 35, High Street, Huntingdon. (Jan., 1909).

Fowler-Ward, Dr. F., 40, Berners Street, Ipswich. (Oct., 1913).

Freeland, G. Scott, Hill Rise, Quarry Hill, Tonbridge. (July, 1912).

Frost, W. J. C., 13, Fairlawn Avenue, Chiswick Park, London, W. (Aug., 1913).

Frostick, J., 50, Boundaries Road, Balham, London, S.W. (Dec., 1909).

Fry, J. S., Cobo, Guernsey, (Aug., 1913).

Galloway, Mrs. E., Fernville, Fortis Green Road, East Finchley, London, N. (Jan., 1908).

Galloway, P. F. M., Durban, St. Peter's Avenue, Caversham, Reading, (Nov., 1907).

Gardiner, Mrs. Stanley, Whitehorn, Barton Road, Cambridge. (Jan., 1913).

Gerrard, John, M.B.O.U., Worsley, Manchester. (June, 1905).

Gloyns, Horace, R., Kew Cottage, Holmesdale Road, Hampton Wick, Kingston-on-Thames. (Oct., 1912).

Godry, Edouard, LeCoteau, Lantheuil par Creully (Calvados), France. (Jan., 1912).

Goodacre, Hugh, Ullesthorpe, Lutterworth. (May, 1912).

Goodchild, H., M.B.O.U., 66, Gloucester Road, Regent's Park, London, N.W. (July, 1903).

Goodchild, J. Clare, Suffolk. (Jan., 1913).

Goodfellow, W., The Poplars, Kettering. (October, 1908).

Gorringe, The Rev. Reginald, Manston Rectory, Sturminster, Newton, Dorset. (Dec., 1902).

Gosse, Dr. Philip, M.B.O.U., Curtlemead, Beaulieu, Brockenhurst, Hants. (April, 1910).

Gott, Mrs. F., Weetwood Garth, Leeds. (Nov., 1912).

Gourlay, H., Kempshott Park, Basingstoke. (November, 1907).

Graham, John, Rainbow Hotel, Kendal. (February, 1911).

Gray, H., M.R.C.V.S. (*Hon. Veterinary Surgeon*), 23, Upper Phillimore Place, Kensington, London, W. (May, 1906).

Greeven, Miss M., c.o. Mrs. Green, 41, Clanricarde Gardens, Notting Hill Gate, London, W. (October, 1907).

Grey, Mrs., Quarry Hill, Hendon, London, N.W. (January, 1914).

Grossmith, J. L., The Grange, Bickley, Kent. (January, 1913).

Gurney, G. H., Keswick Hall, Norwich. (June, 1913).

Haggie G. E., B.A., Bruncombe, Foxcombe Hill, Oxford. (Feb., 1910).

Hahn, Countess C. V., 192, Walpole Road, Wimbledon, London, S.W. (Aug., 1910).

Hall, Miss A. F., 26, Adelaide Road, Regent's Park, London, N.W.; and Denholme, Hayling Island, Havant. (Sept., 1911).

Hale, Clinton B., Pedrogosa and Laguna, North West Corner, Santa Barbara, California, U.S.A. (April, 1911).

Hansell, Frank, Bank House, Granton Road, Edinburgh. (Nov., 1911).

Harper, E. W., F.Z.S., M.B.O.U., Government Road, Nairobi, Brit. E. Africa. (October, 1907).

Harris, Chas., 114, Bethnal Green Road, London, N.E. (April, 1910).

Harrison, J. H., The Crescent, Hastings Place, Lytham. Dec., 1901).

Hartley, Mrs. E. A., St. Helen's Lodge, Hastings. (Sept., 1907).

Harvey, Lady, Langley Park, Slough. (June, 1908).

Hatchell, D. G., present address unknown. (Dec., 1911).

Hattersley, E., 16, Thornfield Road, Far Headingley, Leeds. (Jan., 1913).

Hawke, The Hon. M. C., Wighill Park, Tadcaster. (Nov., 1902).

Hawkins, L. W., Estrilda, New Clive Road, West Dulwich. (Orig. Member).

Hebb, T., Brooklea, The Downs, Luton. Aug., 1912).

Henderson, Mrs. W. F., Moorfield, Upper Claremont, Newcastle-on-Tyne. (Nov., 1908).

Henderson, J. Alex., Cassland, Springwell Road, Tonbridge. (Aug., 1913).

Henstock, J. H., Market Place, Ashbourne, Derbyshire. (March, 1907).

Hetley, Dr. Henry, Beaufort House, 114, Church Road, Norwood, S.E. (Jan., 1908).

Hewitt, F. W. G., The Old Hall, Weelsby, Grimsby. (April, 1909).

Hincks, Miss E. M., Baron's Down, Dulverton, Somerset. (Dec., 1904).

Hodkin, Mrs. Sedbergh House, Kew Green, Surrey. (Feb., 1908).

Hoffmann, R., Tower House, Leigham Court Road, Streatham, London, S.W. (Mar., 1912).

Holden, Ralph, A., F.Z.S., 5, John Street, Bedford Row; London, W.C., and Harpenden, Herts. (July, 1911).

Hollins, Miss, Greyfriars, Preston. (Feb., 1906).

Hollins, B., The Aviaries, Coppice Drive, Harrogate. (May, 1903).

Holmes. Thomas, 46, Aglionby Street, Carlisle. (Jan., 1911).

Hopkinson, Emilius, D.S.O., M.A., M.B., Oxon, South Bank, Bathhurst, Gambia, West Africa. (Oct., 1901).

Horsbrugh, Major, B. R., Tandridge Priory, Oxted, Surrey. (Oct., 1909).

Houlton, Charles, Laburnum House, Denton's Green, St. Helens, (Nov., 1901).

Howe, Frank, 54, Thomas Street, Wellingborough. (Feb., 1902).

HUBBARD. Mrs. D. L., Casa Sta. Monica, Bordighera, Italy. (Jan., 1905).

HUME, JAMES, Hepscott, Morpeth. (June, 1903).

HUMPHRYS, RUSSELL, Present address unknown. (July, 1902).

HURNDALL, Mrs. R., Ditton Hill Lodge, Ditton Hill, Surbiton, Surrey. (April, 1913).

ISAAC, CHAS., Somerton, Bath Road, Slough. (March, 1911).

JAMRACH, A. E., 180, St. George's Street, London, E. (July, 1909).

JARDINE, J., Castle Inilk, Lockerbie, N.B. (Aug., 1913).

JENKS, H., 54, Ebury Street, London, S.W. (Aug., 1913).

JOHNSON, Miss L. STURTON, Orotava House, Hastings. (Sept., 1910).

JOHNSON, Major, F., Melrose, Wilberry Road, Hove, Brighton. (Aug., 1912).

JOHNSON, H. V., 18 Chambres Road, Southport. (Nov., 1908).

KELSON G. MORTIMER, Home Cottage, Sunbury-on-Thames. (June, 1913).

KENNEDY, Lt., G., c/o Mrs. Kennedy, 7, Albion Road, Sutton; Surrey. (May, 1908).

KENWORTHY, J. M., Meadowcroft, Windermere. (June, 1909).

KING, FRANK, High Holme Nurseries, Louth, Lincs. (March, 1909).

KITE, E. BAGSHOT, Haines Hill House, Taunton. (Feb., 1912).

KNOBEL, Miss E. MAUD, 32, Tavistock Square, London, W.C. (Dec., 1911).

KOMYAKOFF, ALEXIS, Novinsky Boulevard, 109, Moscow, Russia, (Dec., 1912).

LAMB, Mrs., The Limes, Worting, Basingstoke. (March, 1912).

LAMB, E. J., Alverstone, Thetford Road, New Malden, Surrey. (May, 1906).

LATHBURY, Dr. C. J., Ashton Avenue, Dunstable. (Feb., 1913).

LEE, Mrs. E. D., Hartwell House, Aylesbury. (Sept., 1910).

LEGH DE LEGH, Dr. H., Redcar. (April, 1911).

LEWIS, J., Corstorphine, Ryde. (June, 1908).

LILFORD, The LORD, Lilford Hall, Oundle, Northants. (January, (1914).

LITTLEDALE, Lieut., 17, Duncan Road, Southsea, Portsmouth. (Jan., 1913).

LONGDON, Mrs. C. A., Arreton, Epsom Road, Guildford, (Feb., 1909).

LOVELL-KEAYS, Dr. L. F., Park Lodge, East Hoathly, Halland, Sussex. (Mar., 1913).

LOWE, A. J. C., Present address unknown. (January, 1912).

LUCAS, Miss EMMA, Bramblehurst, East Grinstead, Sussex. (Sept., 1913).

LUCAS, N. S., M.B., F.Z.S., 19 Westbourne Terrace, Hyde Park, London, W. (January, 1914).

LYNAM, C. C., M.A., Bardswell Road, Oxford. (Sept., 1913).

Lythgoe, G. W. F., 173, Clifton St., Old Trafford, Manchester. (Nov., 1906).

Mace, J., 6-8, Exchange Street, Sheffield. (Feb., 1911).

McCullough, John, Fairy Hill, Cranmore Park, Belfast. (Jan., 1914).

McDonagh J. E. R., M.R.C.S., L.R.C.P., F.Z.S., L.L.S., 4 Wimpole Street, London, W. (Jan., 1903).

McDonald, Miss, Meadow Bank, Hollington Park, St. Leonards-on-Sea. (April, 1911).

McIntyre, Mrs. J., Muchall, Wolverhampton. (February, 1911).

McLaren, The Hon. Mrs. Morrison, Parkfield, Park Lane, Southwick, Brighton. (November, 1906).

Malden, Viscountess Eveline, Great Bookham, Leatherhead, (Aug., 1909).

Mallett, E. A., M.A., Rose Villa, Huddersfield Road, Barnsley. (Septemebr, 1911).

Mannering, R., 117, Elsenham Street, Southfields, Wandsworth, London, S.W. (February, 1912).

Mappin, Stanley, 12, Albert Hall Mansions, Kensington Gore, South Kensington, London, S.W. (February, 1911).

Marmont, W. B., The Firs, Amberley, Stroud, Glos. (October, 1908).

Marriner, J. Sumner, c/o Mrs. Marriner, Bay View, Koksilah P. Office, Vancouver Island, B.C. (October, 1909).

Marshall, Mrs., Marrowells, Walton-on-Thames. (April, 1911).

Master, G., M.B., B.C., 86, Guildhall Street, Bury St. Edmunds. (Nov., 1903).

Matthews, Mrs. J. E. Present address unknown. (March, 1912).

Maxwell-Jackson, Mrs. M., Cowhill, Rutland Road, Harrogate. (January, 1913).

Maxwell. C. T., 1, Shardcroft Aven, Herne Hill, S.E. (Dec., 1908).

Meadows, J. C. W., 19, Cardiff Road, Luton. (Feb., 1908).

Meakin, H., 16, Shaftesbury Road, Luton. (January, 1913).

Miller, Mrs. K. Leslie, 27, Belgrave Road, London, S.W. (Jan., 1904).

Millsum, O., 7, Cliftonville Parade, Margate. (July, 1907).

Mitchell, H., Haskells, Lyndhurst, Hants. (Sept., 1903).

Money, L. G. Chiozza, M.P., The Grey House, Hampstead Lane, London, N. (October, 1910).

Montague, G. R., 63, Croxted Road, Dulwich, S.E. (February, 1909).

Montgomery, W. O., Rubana, Burton Road, Hornsea, Hull. (Jan., 1913).

Morgan. Mrs. E. C., 17, York House, Church Street, Kensington, London, W. (January, 1913).

Morris. A., Broadway Chambers, Ilford. (February, 1911).

Mortimer. Mrs. Wigmore, Holmwood, Dorking. (Orig. Mem.).

Mortimer Miss, Wigmore, Holmwood, Dorking. (November, 1908).
Mundy, Miss Sybil, Shipley Hall, Derby. (Aug., 1911).
Murton, Marshall, Osborn Villas, Newcastle-upon-Tyne. (Aug., 1913).
Newley R. A., 24, Stockwell Green, London, S.W. (Dec., 1902).
Newman T. H., F.Z.S., M.B.O.U., Newlands, Harrowdene Road, Wembley, Middlesex. (July, 1903).
Nicolson, Thos. G., F.Z.S., Glenoe, Walton-on-Thames. (June, 1910).
Oakey, W., 34, High Street, Leicester. (Orig. Member).
Oberholser, Harry C., 1444, Fairmont Street, N.W., Washington. D.C., U.S.A. (Dec., 1903).
O'Donnell, O., Hyntle Place, Hintlesham, Ipswich. (Aug., 1912).
O'Donnell, Major-Gen. H., C.B., D.S.O., Banu, N.W.F.P., India: (Oct., 1913).
O'Neil, Arthur, 25, Eldred Street, Carlisle. (Jan., 1911).
O'Reilly, Nicholas S., 144, Eastern Road, Kent Town, Brighton. (Orig. Member).
Ogg, J. E., The Grove, Cockburnspath, Berwickshire. (Feb., 1913).
Onslow. The Countess of, Clarendon Park, Guildford. (April, 1913).
Owen, P., 19, 5 Rue Laperouse, Paris, France. (March, 1912).
Page, W. T., F.Z.S. (*Hon. Editor*), Glenfield, Graham Avenue, Mitcham, Surrey. (May, 1905).
Painter, V. Kenyon, Cleveland, Ohio, U.S.A. (Nov., 1910).
Partridge, Mrs., Beaufort, Winchester Road, Worthing. (December, 1905).
Paterson, Rev. J. Mapletoft, St. John's Vicarage ,Hollington, St. Leonard's-on-Sea, Sussex. (Nov., 1908).
Pauwels, Robert E., Everberg par Cortenberg, Brabant, Belgium. (Sept., 1909).
Pennant. Lady Edith Douglas' Soham House, Newmarket. (July, 1908).
Perkins, E., Chester Hill, Woodchester, Stroud, Gloucestershire. Feb., 1903).
Perreau, Major, G. A., F.Z.S., 2-4 Gurkha Rifles, Bakloh, Punjab; India. (Dec., 1903).
Perreau, Mrs. R. A. D., 11, Douglas Crescent, Edinburgh. (Sept., 1908).
Perring, C. S. R., Claremont Avenue, New Malden, Surrey. (Oct., 1902).
Phair. H. J., Broad Street, Alresford. (January, 1912).
Pickard, H. K., 298, West End Lane, Kilburn, London, N.W. (October, 1901).
Pickles, W. H., Stonyhurst, Morecambe, Lancs. (May, 1904).
Pike, L. G., F.Z.S., King Barrow, Wareham. (December, 1910).
Pilkington, Lady Kathleen, Chevet Park, Wakefield. (Sept., 1908)
Pithie, Miss Dorothy, 68, Clarendon Road, Southsea, Portsmouth. (Sept., 1911).

Poltimore, Lady, Poltimore Park, Exeter. (Aug., 1911).

Pond, Mrs. T., 174, Upper Parliament Street, Liverpool, (Nov., 1902).

Puck, Otto, Darenth Lodge, Chingford, N.E., (May, 1912).

Pullar, Lawrence, H. F., F.Z.S., Dunbarnie Cottage, Bridge of Earn, Perthshire. (Oct., 1913).

Quait, Mrs. Wortley, St. Brannock's, Mundesley, Norfolk. (March, 1912).

Quincey, R. de Quincy, Inglewood, Chislehurst, Kent. (Aug., 1910).

Rattigan, G. E., Lanarkslea, Cornwall Gardens, London, S.W. (March, 1909).

Raven, W. H., 239, Derby Road, Nottingham. (Oct., 1909).

Rawson-Shaw, Mrs. Thos., Allangate, Rustington, Worthing. (Feb., 1913).

Raynor, Rev. G. H., M.A., Hazleigh Rectory, Maldon. (Dec., 1909).

Read, Mrs. W. H., Church Croft, Weston Park Road, Thames Ditton. (January, 1911).

Reeve, Capt. J. S., Leadenham House, Lincoln. (March, 1908).

Restall, J. A., 82, Cambridge Street, Birmingham. (Nov., 1903).

Rice, Capt., G., Clayquhat, Blairgowrie. (July, 1902).

Robbins, H., 37, New Oxford Street, London, W. (October, 1908).

Roberts, Mrs. G. L., Woogate, Maze Hill, St. Leonards-on-Sea, Sussex. (January, 1911).

Robson, J., 28, Camden Grove, Peckham, S.E. (Dec., 1909).

Roehl, C., 400, Edgware Road, London, W.. (Sept., 1911).

Rogers, W. T., Weald View, Ongar Road, Brentwood. (Oct., 1907).

Rogerson, Mrs. Fleurville, Cheltenham. (Feb., 1903).

Rotch, F. M., Park House, Park Road, Teddington. (Orig. Mem).

Roth, Fred, G. R., Sherwood Place, Englewood, N.J., U.S.A. (Nov.; 1908).

Rothwell, James, E., Sewell Avenue, Brooklyn, Mass., U.S.A. (Feb., 1911).

Routh, Col. J. J., 2, Beechworth Villas, Cheltenham. (Jan., 1912).

Row, C. H., Chapel House, Long Melford, Suffolk. (Dec., 1905).

Rumsey, Lacy, 23, Rua de Terpa Pinto, Villa Nova de Gaya, Oporto, Portugal. (Oct., 1911).

Ryan, G. E. (Bar-at-law), Hintlesham Hall, Ipswich. (Nov., 1913).

Ryan, W. J. Norwood, St. John's, Beaufort Road, Kingston-on-Thames. (Sept., 1913).

Rutherfurd, Miss Susan, 14, Great Stuart Street, Edinburgh. (Jan., 1913.

Schluter, J. C., Heathwood, 5, Dacres Road, Forest Hill, London; S.E. (April, 1913).

Schuylz, D. G., 12, Toe-Haringvlist, Rotterdam, Holland. (Jan., 1914).

Scott, B. Hamilton, Hamildean, Ipswich. (July, 1910).

Scott, J. Easton, M.B., Birdhurst, Woodcote Road, Wallington; Surrey. (March, 1908).

Scott. Mrs. J. Easton, Birdhurst, Woodcote Road, Wallington, Surrey. (March, 1908).

Scott-Miller, R., Greenoak Hill, Broomhouse, Glasgow. (May, 1913).

Shipton, A. J., 71, Cloudesdale Road, Balham, London, S.W. (April, 1913).

Sich, H. L., c/o Dr. L. Lovell-Keays, Park Lodge, East Hoathly, Halland, Sussex, and Corney House, Chiswick, W. (June, 1908).

Sidebottom, Mrs. E. Harrop, Etherow House, Hollingworth, Manchester. (February, 1908).

Sills Arthur, 260, Loughborough Road, Leicester. (Jan., 1911).

Silver, Allen, 303, High Road, Streatham, London, S.W. (Orig. Mem.).

Simpson, R. E., 9, Christ Church Avenue, Armley, Leeds. (Dec., 1907).

Sladden, J. H., 140, Denmark Road, Lowestoft. (Oct., 1908).

Smith-Ryland, Mrs., Barford Hill, Warwick. (April, 1909).

Smith W. S., 24, Jubilee Street, Luton. (December, 1908).

Smith, J., Woodlands, Kendal.

Smyth, Miss Alfreda, 40, Davenport Road, Catford, London, S.E. (Jan., 1911).

Snarey, H., 21, Leamington Road, Blackburn. (March, 1911).

Somers, Frank, M.R.C.V.S., 66, Francis Street, Leeds. (Jan., 1907).

Southcombe, S. L., Highlands, Ash, Martock, Somerset. (Sept., 1910).

Sprankling, E., Brookland Cottage, South Road, Taunton. (Feb., 1908).

Sprawson, Dr. E. C., 68, Southwood Lane, Highgate, London, N. (Oct., 1913).

Sproston, Mrs. The Elm House, Nantwich. (Jan., 1911).

Stead, Edgar, Strowan, Christchurch, New Zealand. (Sept., 1911).

Sterckmans, Dr. C., 28, Rue de la Station, Louvian, Belgium, (August, 1910).

Stocker, J. M., (Present address unknown). (Nov., 1908).

Stoney, Mrs. Stella, 21 Mount Carmel Chambers, Duke's Lane, Kensington, London, W. (August, 1912).

Storey, Mrs. A., Summer Hill, Tarporley, Cheshire. (Nov., 1912).

Street. E., The Poplars, Oatwoods, Anslow, Burton-on-Trent. (May, 1909).

Strickland, E. A., 16, Alma Road, Windsor, (May, 1912).

Strong. Herbert, The Hollies, Beckenham Lane, Bromley, Kent. (April 1913).

Sykes, John, 16, Shorthope Street, Musselburgh. (Jan., 1912).

Suffolk, and Berkshire Countess of, Charlton Park, Malmesbury. (Feb., 1909).

Suggitt, R., Suggitt's Lane, Cleethorpes, Grimsby. (Dec., 1903).

Sutcliffe, Albert, Fairholme, Welholme Road, Grimsby. (May, 1907).
Swayne, Henry, A., 29, Percy Place, Dublin. (Jan., 1913).
Swaysland, W., 47, Queen's Road, Brighton. (Orig. Mem.).
Taintegnies, Baronne Le Clement de, Cleveland, Minehead, Somerset. (Aug., 1913).
Tavistock, The Marquis of, Woburn Abbey, Woburn. (Jan., 1913).
Temple, W. R., Ormonde, Datchet, Windsor. (Dec., 1908).
Teschemaker, W. E., B.A., Ringmore, Teignmouth. (Mar., 1907).
Thomasset, B. C., F.Z.S., The Manor House, Ashmansworth, Newbury. (July, 1912).
Thompson, M., 4, William Street, Roslyn, Dunedin, New Zealand. (June, 1911).
Thorburn, Miss C. W., 99, Edge Lane, Liverpool. (March, 1910).
Thorniley, Percy W., Shooter's Hill, Wem, Shrewsbury. (May, 1913).
Thwaites, Dr. Gilbert B., 94, Beaconsfield Road, Brighton. (May, 1910).
Tidey, J. W., Oakdene, Victoria Road, Worthing. (Jan., 1912).
Tilley, G. D. F., New York, Z.S., Darien, Connecticut, U.S.A. (Jan., 1913).
Tomassi Baldelli, La Countessa G., 4, Via Silvio, Pelico, Florence, Italy. (Dec., 1901).
Tomlinson, Malcolm R., Shepherd's House, Inveresk, Midlothian. (April, 1913).
Townsend, S. M., (*Hon. Exhibitional Secretary*), 3, Swift Street, Fulham, S.W. (Orig. Member).
Travers, Mrs. Johnson, Fern Hill, Clonakilty, co. Cork. (Dec., 1903).
Travis, Mrs., Pedmore Grange, Stourbridge. (Jan., 1911).
Treloar, Sir Wm., Bart., Grange Mount, Norwood, S.E. (June, 1909).
Turner-Turner, Mrs., Abbey Spring, Beaulieu, Brockenhurst, Hants. (Nov., 1910).
Tyson, C. R., 169, Sloane Street, Chelsea, London, S.W. (Feb.; 1911).
Urwick, D. R., St. Cross Mill, Winchester. (Mar., 1913).
Vale, Lewis, 8, Broadway, Woodford, London, N.E. (May, 1913).
Valentine, E., 7, Highfield, Workington. (Dec., 1911).
Vernon, Mrs. E. Warren, Lamancha House, Lamancha, Peebleshire. (Oct., 1905-10, rejoins Jan., 1914).
Villiers, Viscountess, C., Antwick's Manor, Letcombe Regis, Wantage. (Nov., 1912).
Vollmar, P., 8, George Street, Minories, London, E.C. (Feb., 1909).
Waddell, Miss E. G. R. Peddie, 4, Great Stuart Street, Edinburgh. (Feb., 1909).
Wade, L. M., Oakhill Road, Ashtead, Surrey. (Sept., 1913).

Wait, Miss L. M. St. A. 12, Rosary Gardens, South Kensington, London, S.W. (Dec., 1907).

Walker, A., M.A., B.Sc., M.D., The Rectory, Oodsall, Retford. (Dec., 1907).

Walsh, J., 159, Duke's Brow, Blackburn. (Dec., 1908).

Walsh, Jeffrey, Pheasant Aviaries, Penny Street, Blackburn. (Oct. 1910).

Ward, Hon. Mrs. Somerset, Carrowden Castle, Donaghadee, co. Down. (Oct., 1905).

Wardale H., Willington House, Willington Quay, Northumberland. (May, 1903).

Waren-Williams, H. E., Woodcote Lodge, Woodcote Road, Wallington, Surrey. (Jan., 1911).

Watson, S., 37, Tithebarn Street, Preston. (Sept., 1910).

Watts, Rudolph, Wilmar, Wiggenhall Road, Watford. (Nov., 1906)

Webb, Miss Katherine, Emery Down, Millington Road, Cambridge. (July, 1909).

Webster, Lady, Powdermill House, Battle, Sussex. (Feb., 1911).

Weir, J., Oak Cottage, Ashley, New Milton, Hants. (Dec., 1912).

Westacott, H., Wellington Hotel, Minehead, Somerset. (Sept., 1907).

Weston, G. E., 42, Lewisham Road, Dartmouth Park, London, N.W. (July, 1908).

Wethey, Mrs. R. E., Leholm, Redcar. (July, 1911).

Whistler, Hugh, I. P., Jhelum, Punjab, India. (Jan., 1913).

Whitmore, Sydney, 3, Holly Hill, Hampstead, London, N.W. Sept., 1911).

Willford, Henry (*Hon. Photographer*), Uplands View, Haven-street, Ryde. (July, 1908).

Willford, Neville, Woodside, Isabel Road, Hornchurch, Romford. (July, 1908).

Williams, Mrs. C. H., Emmanuel Parsonage, Exeter. (Jan., 1911).

Williams, Mrs. Ffrench, 28, Argyll Mansions, King's Road, Chelsea, London, S.W. (Dec., 1909).

Williams, Mrs. Howard, 51, Harley House, Regent's Park, London, N.W.(June, 1910).

Williams, Sidney, F.Z.S. (*Hon. Treasurer and Business Secretary*), Holland Lodge, Edmonton, London. (Oct., 1910).

Wilson, Miss F. M., 34, Charrington Street, Oakley Square, London, N.W. (March, 1906).

Wilson, T. N., M.A., Oak Lodge, Bitterne, Southampton. (Jan., 1902).

Winchelsea and Nottingham The Countess of, Haverholme Priory, Sleaford. (June, 1903).

Wimble, Chas., Thirlmere, South End Road, Beckenham. (Dec., 1909).

Wolcott, F.C., 14, Wall Street, New York, U.S.A. (March, 1913).

Wood, Mrs. Cyril. Present address unknown. (Jan., 1912).

Wood, L. W., Malting Farm, Aldwincle, Thrapston. (April, 1911).

Workman, W. H., M.B.O.U., Lismore, Windsor, Belfast. (June, 1912).

Wright, G. B., c.o. G. Heaton, Church Hill, Handsworth, Birmingham. (June, 1908).

Wright, H. Newcombe, L.L.B., Ravenshill, Huddersfield. (Jan., 1911).

Wrottesley, The Hon. Walter B., F.Z.S., Seisdon, Staplecross, Hawkhurst. (Dec., 1902).

Yealland, James, Binstead, Ryde. (Sept., 1909).

Yeoman, Mrs. Pattison, The Close, Brompton, Northallerton, Yorks. (April, 1910).

Young, Arthur E., 33, Brandling Park, Newcastle-on-Tyne. (Oct., 1911).

Yule, Lady, Hanstead House, Bricket Wood, Herts. (Jan., 1911).

The Hon. Business Secretary requests that he may be promptly informed of any errors in the above list.

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Associates.

Hentsch, W. J., Douglas Villa, Acacia Grove, New Malden, Surrey. (Jan., 1904).

Hyde, and Co., Ltd., R., Harold Street, Camberwell, S.E. (May, 1904).

The Hon. Business Secretary requests that he may be promptly advised of any errors or omissions in the above List.

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RULES.

1. The objects of "The Foreign Bird Club" shall be the mutual encouragement and assistance of the members in keeping and breeding all species of Birds, and the exhibiting of Foreign Birds, and the improvement of Shows in regard to them.

2. The Club shall be composed of members and associates. Every member shall pay an entrance fee of 2s. 6d. and an annual subscription of 10s. Every associate shall pay an entrance fee of 2s. 6d. and an annual subscription of 5s. Associates shall have such of the privileges of the Members as the Council shall from time to time direct. Subscriptions shall be due and payable in advance on the 1st of January in each year. If any member's or associate's subscriptions shall be more than three months overdue, he shall be suspended from all benefits of the Club, and if more than nine months overdue notice of his having ceased to be a Member or Associate of the Club, and of the cause, may be published in Notices to Members; and on such notice being published he shall cease to be a member, or associate accordingly, *but his liability for overdue subscriptions shall continue.*

3. New members shall be proposed in writing by a member of the Club; and the name and address of every person thus proposed, with the name of the person proposing him, shall be published in the Notices to Members. Unless the candidate shall, within fourteen days after the publication of his name, be objected to by at least two members, he shall be duly elected. If two or more members shall lodge with either of the Secretaries objections to any candidate, he shall not be elected, but the signature to the signed objecjections must be verified by the Scrutineer. The Secretaries and the Scrutineer shall not disclose the names of the objectors.

4. Any member wishing to resign at the end of the current year of the Club shall give notice of his intention to one of the Secretaries before the 31st of December, and in default of such notice *he shall be liable to the following year's subscription.*

5. The Officers of the Club shall be elected from the members, and shall consist of a President, one or more Vice-presidents, an Auditor, a Scrutineer, one or more Secretaries, a Treasurer, a Veterinary Surgeon, and a Council of Eighteen members, and such number of Judges as shall from time to time be determined by the Council. The Editor, Secretaries, Treasurer, and Veterinary Surgeon shall be *ex-officio* members of the Council. Three Members of the Council retire annually by seniority, but are eligible for re-election. The Editor, Secretaries, and Treasurer shall be elected trienially. The Council and Judges shall be elected in a manner hereinafter provided. The other officers shall be elected annually at a meeting of the Council, immediately after their own election.

6. The election for the three annual vacancies on the Council, and the Judges, shall take place every year between the 15th of November and the 5th of December. The Secretaries shall ascertain which of the members are willing to stand for election to office, and shall send to each member of the Club or about the 15th of November a voting paper containing a list of all such members, showing the offices for which they are respectively seeking election. Each member shall make a (×) opposite the names of those for whom he desires to vote, and shall sign the paper at the foot, and send it in a sealed envelope to the Scrutineer, so that he may receive it before 5th of December. The Scrutineer shall prepare a return of the officers elected, showing the number of votes recorded for each candidate, and send it to one of the Secretaries for publication in the Notices to Members for December. The Scrutineer shall not reveal to any person how any member shall have voted. In the event of an equality of votes the President shall have a casting vote.

7. Dealers in birds shall not be eligible for election to any office in the Club, except that of Judge. For the purpose of this rule,, any member who habitually buys birds with the intention of selling them again, shall be deemed a bird dealer. Before the annual election of officers, the Secretaries shall submit to the Council the list of members willing to stand for election to the Secretaryship, the Treasurership, and the Council; and the Council shall remove from the list the name of any candidate who shall be, in the opinion of the Council, a dealer in birds, within the meaning of this rule. The decision of the Council or of any Committee to whom the Council shall delegate its power under this rule, shall be final. When a dealer is proposed as a member of the Club, the fact of his being a dealer shall be stated in the Notices to Members.

8. It shall be lawful for the Council to delegate any of its powers to a Committee.

9. The Council may appoint an Arbitration Committee, which may decide questions at issue between members or associates, when requested to do so by both parties. Any decision of such Committee shall be final. Except to the extent permitted by this rule, the Club and its officers shall decline to concern themselves with disputes between members.

10. The Council shall have power to alter and add to these Rules, but shall give to the members notice of any proposed alteration or addition, and in the event of six members objecting thereto within fourteen days the proposed alterations or additions shall be submitted to the votes of the members. Failing such objection the alteration shall date from its adoption by the Council.

11. The Council shall have power to expel any member or associate at any time.

12.—Neither the office of Scrutineer nor that of Auditor shall be held for two consecutive years by the same person. The Scrutineer shall not be a candidate at any election at which he acts as Scrutineer.

13. If any office becomes vacant at any time other than the end of the current year of the Club, the Council shall have power to appoint any member to fill the vacancy.

14. The decision of the majority of the Council shall be final and binding on the Club, but a resolution passed by the Council shall not be acted upon unless there be an absolute majority of the Council (and not merely of those voting) in its favour.

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Notices to Members.

Subscriptions: Will Members please note that these became due on January 1st, and are payable in advance! We would also point out that the necessity for the prompt payment of subscriptions is frequently overlooked, inflicting needless labour upon the Hon. Secretary, and equally needless waste of funds—will Members suffer this reminder? We would also point out that subscriptions should be sent to the Hon. Treasurer, Mr. S. Williams, Holland Lodge, Edmonton, London, N., and not to Mr. Willford, who gave up the treasurership in October, 1912.

Income: We ask all our Members to assist in giving us a double income *this year*, by doubling the amount of their subscriptions when remitting same; with our present membership the future is assured—this would wipe out all deficit and enable us to put coloured plates in hand for future volumes; this should not be a burden upon any, and to maintain permanently what has been already achieved is, assuredly, well worth the effort.

Coloured Plates: Arrangements had been made to issue one with the present number, but there has been unavoidable delay in getting the chromo-lithographs completed. Four are in hand and we feel assured that the general opinion will be, that they compare very favourably with any we have hitherto issued, both as to interest and quality. We hope to issue the first with February *Bird Notes.*

Breeding Medals: The Awards' Committee have granted medals for the breeding of the undermentioned Species and Hybrids for the first time in Great Britain, as follows:

Species:—Great Tit: Dr. M. Amsler.
Lineolated Parrakeet: Miss M. E. Baker.
Chattering Lory: Lady Poltimore.
Orange Weaver: Lady Poltimore.
Hybrids.—Great Nigerian Yellow × Short-winged Weaver: W. Shore Baily.
Blue-breasted Waxbill × Cordon Bleu: Dr. M. Amsler.
Jendaya × Golden-crowned Conure: Lady Poltimore.

WESLEY T. PAGE, Hon. Editor.
S. WILLIAMS, Hon. Business Sec. & Treas.

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Post Mortem Reports.

Vide Rules (See Page iii of Cover.)

Dead Birds for *Post Mortem* Examination Received during the Month are Reported upon in the Following Issue of "Bird Notes."

Yellow-winged Sugarbird (♀). (Mrs. G. Christie, Elgin, Morayshire. Received on December 10th; died of pneumonia, which cannot very well be avoided in an ever changeable climate like ours.

Masked Grassfinch. (G. Scott Freeland, Tonbridge). Cause of death, pneumonia. I have never found Inger (Niger) seed injurious and have fed Finches, which have lived on it for years.

Red-crested Cardinal (♀). (B. Hamilton Scott, Ipswoch). Cause of death, aspergillary caseous pneumonia, due to the fungus *Aspergillus fumigatus.* This is a common cause of death of Cardinals. I have fully described this disease in Vol. I. of *Hoare's System of Veterinary Medicine.* In Canaries as well as Cardinals it often gives rise to the so-called asthma and also the "gaping-disease" which resembles in symptoms "gapes" or parasitic bronchitis. Iodine of potasium and liquor arsenicalis if given in time in the drinking water may bring about a cure. But generally the disease is far advanced before one observed any symptoms. No species of bird is exempt. It is rarer in mammals. It frequently causes in pigeons "canker" or mycotic stomatitis, which has been conveyed to pigeon-crammers and others. The *Aspergillus fumigatus* is commonly found on all kinds of grain, straw, hay, etc., and particularly when musty or damp. It often gives rise to a pseudo-tuberculosis and in some instances may cause abscesses around the joints.

The liquor arsenicalis commonly termed Fowler's Solution of Arsenic, should be prepared for animals without the Tincture of Lavenduld, which the British Pharmacopæia preparation contains.

LINEOLATED PARRAKEET (♂). (Capt. John S. Reeve, Lincoln). Evidently it died in convulsions.

HOODED SISKIN (♂), and YELLOW-WINGED SUGARBIRD (♂). (G. Scott Freeland, Tonbridge). Both died from acute pneumonia. I am afraid the Blue-winged Bulbul sent on October 8th did not get to its proper destination.

Answered by Post:—J. L. Grossmith, Miss Chawner, R. S. de Q. Quincey, T. Webb, Mrs. Turner-Turner.

H. GRAY, M.R.C.V.S.

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Illustration and Deficit Fund.

The Committee acknowledge with best thanks the following donations:

	£	s.	d.
Bruce, Miss A.	1	0	0
Christie, Mrs.	0	5	0
Hopkinson, Dr. E., D.S.O.	3	3	0
Lovell-Keays, Dr. L.	1	12	0
Page, W. T.	1	0	0
Rice, Captain	1	13	0
Routh Col. J. J.	2	2	0
Wilson, Miss F. M.	0	10	0

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New Members Elected.

Peter Arnott; 37a. Grange Road, Alloa.
C. E. Dell; 12 High Street, Harlesden, London, N.W.
Mrs. E. Warren Vernon, Lamancha House, Lamancha, Peebleshire.
Mrs. M. H. Davies, Daresbury Hall, Nr. Warrington.
Lady Yule; Hanstead House, Bricket Wood, Herts.
John McCullough, Fairyhill, Cranmore Park, Belfast.

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Proposed for Election as Members.

The Lord Lilford, Lilford Hall, Oundle, Northants.
By Capt. J. S. Reeve.
D. G. Schuyl, 12, Toe-Haringvliet, Rotterdam, Holland.
By R. Suggitt.

N. S. Lucas, M.B., F.Z.S., 19, Westbourne Terrace, Hyde Park, London. *By Miss E. Lucas.*

R. Cross, Northumberland Park, Tottenham, London, N. *By S. Williams.*

The Bird Market.

Advertisements must be prepaid and reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny, minimum 4d. Non-Members, three words a penny, minimum 6d.

COLOURED PLATES: All the plates that have been issued up to the present, can be obtained uncut for framing at 1/- each, with the exception of "A Beautiful Aviary" which is 1/6.
Apply to The PUBLISHER, Market Place, Ashbourne

MEMBERS' SALES AND WANTS.

FOR SALE: Exhibition Norwich Canaries, at reasonable prices, from 10s. a pair.—Mrs. M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE: Roller Canaries, lovely songsters, 6s. each; carriage and cage free.—Miss Jackson, Cowhill, Rutland Road, Harrogate, Yorks.

WANTED: Hens—Gang-gang Cockatoo, Bourke's and Pennant's Parrakeets. Pairs: Yellow-mantled Parrakeets and Common Parrot Finches. FOR SALE: Hen Violet-eared Waxbill (good); Cocks, Grand Eclectus Parrot and Pintailed Finch; also pair Senegal Parrots.—Miss Clare, 194 Coombe Lane, Wimbledon, S.W.

FOR SALE: Solid Brass Parrot Cages (large) in good condition, cost 42s. each, accept 21s. or near offer if several are taken. Particulars with pleasure.—Mrs. Miller, 27 Belgrave Road, London, S.W.

AVIARIES AND BIRD FOODS: Aviaries Planned and their erection and furnishing supervised at reasonable charges. Aviaries visited and expert advice given. Existing aviaries overhauled, re-arranged, and refurnished. Supervision of aviaries undertaken by monthly, bi-monthly, or quarterly visits, at terms to be mutually agreed upon. In response to numerous requests I am willing to supply all kinds of Bird Seeds and Foods from my own stock. Also special mixtures for Parrots, Parrakeets, etc., at current rates: INSECTILE MIXTURE, 1s., 1s. 6d., 2s., and 2s. 6d. per lb. NEST BARRELS for Parrakeets, Lovebirds, etc., specially made for the purpose, in three sizes—small, medium, and large. These barrels, especially the large size, if fitted with a perch or twigy branch, make excellent shelters for birds of the Finch-tribe during inclement weather. Also Rush Nests for Waxbills and small Finches.—Apply, W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

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STANDARD BRITISH SHOW CAGES.

Detachable Bow Fronts, Club Colour and Perches.

Size suitable for Redpolls, Siskins, or Twites, 2s. 9d. each; size suitable for Linnets, Goldfinches, Bullfinches, and Greenfinches, 3s.; size suitable for Buntings, Chaffinches, and Bramblefinches, 3s. 3d.; size suitable for Wrens and the Smaller Warblers, 4s. 6d. Size suitable for Nightingales, Blackcaps, etc., 5s. 6d.; size suitable for Thrush, Blackbird, or Starling, 6s. 6d.

Mule or Hybrid Show Cages 2s. 3d., and 2s. 9d. each.

Special Show Cages suitable for any variety of British or Foreign Birds, Made to Order. Kindly state wants.

FOREIGN BIRD SHOW CAGES.

Size 1, suitable for Small Foreign Birds, not larger than Gouldian Finches. Price, 4s. 6d. each. Size 2, suitable for Superb Tanagers or Birds of a similar size. Price, 5s. 6d. each. Size 3, suitable for Shamas, or Birds of a similar size, Price, 7s. 6d. each. Size 4, suitable for Perovian, Viga, and Blue-Headed Jays, or Birds of a similar size, Price, 10s. 6d. each.

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WOOD TRAVELLING CASE. With Leather Handles and Patent Fasteners. Made light, neat and strong. The following sizes always in stock: To hold 2 Show Cages 5s. each; to hold 3 Show Cages 6s. each; to hold 4 Show Cages 7s. each; to hold 6 Show Cages 8s. each. Special sizes made to order.

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FOR SALE: Red and Yellow Macaw, just finishing moult, £2. Would take less if going to a comfortable home in Zoological Gardens.—R. A. Dyott, Lichfield.

WANTED: Male St. Helena Seed-Eater, must be a really good songster.—Miss Wait, 12, Rosary Gardens, London, S.W.

FOR SALE: Pair Black-head Siskin × Norwich Canary mules, large birds, cock splendid songster, 15s.; cock Ruficauda Finch 10s.; pair Zebra Finches 7s.; pair Red-beaked Weavers 4s.; all in outdoor aviary. WANTED: Hens Aurora and Reddish Finches.—J. C. W. Meadows, 19, Cardiff Road, Luton, Beds.

De VON & Co.,

114, BETHNAL GREEN ROAD, LONDON.

Telegraphic Address—Oiseaux, London; 'Phone—5489 Wall.

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Mexican Tree Quails; Chukar Partridges; White Peacocks; Demoiselle Cranes; Crown Cranes; White Swans; Black Swans; Black-necked Swans; Bewick's Swans; Canadian Geese; Brent Geese; Hand-reared and pinioned Fulvous Tree Ducks; Bahama Ducks; Carolina Ducks; Mandarin Ducks; White-eyed Ducks; Rosy-billed Ducks; Whistling Red-headed Pochards; Ruddy Sheldrakes; Blue-winged Teals (*Nettium torquatum*); Red-shouldered Teals; Chilian Teals; Chilian Pintails; Chilian Wigeons.

PRICE-LIST FREE ON APPLICATION.

The Foreign Bird Club.

(*Continued from page 1*).

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Notices to Members.

Members Meetings (Winter Session): The second of these will take place on Saturday, February 21st, at the Natural History Museum, Cromwell Road, South Kensington, when Mr. Ogilive-Grant has kindly consented to have the skins of the Flycatchers (*Muscicapidae*) on display in the Bird Room. We trust there will be a good muster—this makes a good opportunity for Members to bring up any unknown birds they possess for identification. The *rendezvous* will be the Entrance Hall of the Museum, at 2-15 p.m.

The Roll: On January 1st this stood at 399, and we have since enrolled ten new Members. We would remind our Members that materially increasing our roll is a task in which all can assist, and that there is no time like the early part of the year for an attempt to be made for a substantial increase in our membership. The Hon. Business Secretary will be pleased to send a specimen copy of the Club Journal to any prospective Member, in the name of any Member sending the address or addresses.

WESLEY T. PAGE, *Hon. Editor*.
S. WILLIAMS, *Hon. Bus. Sec. and Treas.*.

Illustration and Deficit Fund.

The Committee acknowledge with best thanks the following donations :—

	£	s.	d.
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Bousfield, Miss M.	0	11	0
Clarke, S. (o.p. sub.)	0	1	0
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R. Cross; Northumberland Park, Tottenham, London, N.

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By Miss E. G. B. Peddie Waddell.

Mrs. Pope; Howden, Tiverton, Devon.
By Mrs. W. P. Travis.

G. H. Acton, Bytham, Kidmore Road, Caversham, Reading.
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W. E. Steinschen, The Bungalow, Contanchey, Guernsey. *By S. Clarke.*
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Mrs. A. L. Tracy; Rossclare, Canford Cliffs, Bournemouth.
Miss M. Boyd, Webbery, Bideford. *By the Hon. Editor.*

Errata re Roll.

Mrs. C. Anningson, "(Dec., 1910)" should be "(Dec., 1901)."
DELETE. E. Hattersley, 16, Thornfield Road, Leeds.
ADD: Soames, Rev. H. A., M.A., F.L.S., Lyncroft, Bromley, Kent.

Changes and Corrections of Address.

Ward, The Hon. Mrs. Somerset, to Ballywalter Park, Ballywalter, co. Down.
Webster, Lady, to Hotel de le Poste, St. Jean de Luz, France.
Hatchell D. G., to c.o. Parry and Co., Madras, India.

The Bird Market.

Advertisements must be prepaid and reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny, minimum 4d. Non-Members, three words a penny, minimum 6d.

COLOURED PLATES: All the plates that have been issued up to the present, can be obtained uncut for framing at 1/- each, with the exception of "A Beautiful Aviary" which is 1/6.

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MEMBERS' SALES AND WANTS.

FOR SALE. Exhibition Norwich Canaries, at reasonable prices, from 10s. a pair.—Mrs. M. Scholes, Woodcote, Ottery St. Mary.

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FOR SALE. Solid Brass Parrot Cages (large) in good condition, cost from 42s. each; accept from 21s. or near offer if several are taken. Particulars with pleasure.—Mrs. Miller, 27, Belgrave Road, London, S.W.

WANTED. Pairs of any of the following from out-door aviaries: Green Avadavats; Aurora, Diamond or Cuban Finches.—Mrs. Read, Church Croft, Weston Park Road, Thames Ditton.

WANTED: Cocks—Yellow-winged Sugarbird, American Nonpareil (two), Tricolour Tanager, Festive Tanager; Hens—Violet Tanager, Necklace Tanager, Rufous-tailed Grassfinch, Long-tailed Grassfinch. Red-headed Gouldian Finches (2), and Blue Sugarbird.—Scott-Freeland, Hill Rise, Tonbridge.

FOR SALE: Pair Waxwings, 17s. 6d.; hen Indigo Bunting, 10s.; hen Nonpareil Bunting, 15s.. WANTED: Hen Californian Quail; wish to Exchange Zebra Finches, Pair or Cocks only.—R. Suggitt, Suggitt's Lane, Cleethorpes.

WANTED. Cocks, Aurita Dove and Cape Sparrow. Hens, Rusty-cheeked Babbler, Peaceful Dove, Brown-winged Blue Grosbeak, Grey Grosbeak, Himalayan Greenfinch and Rufous-necked Weaver.—W. Shore Baily, Boyers House, Westbury, Wilts.

FOR SALE. Black-cheek Lovebirds, two hens and one cock, very fine birds, to private out-door aviary only—no dealers need apply.—Price and further particulars on application, to Miss S. Rutherfurd, 14 Gt. Stuart Street, Edinburgh.

FOR SALE: Golden Pheasants, 18s. pair, Hens 12s. 6d., Cocks 7s. 6d. WANTED: Hens, Pennants' Parrakeet and Crimson Finch.—Dr. Lovell-Keays, East Hoathly, Sussex.

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FOR SALE: 3 pairs Cockateels, 2 pairs of Senegal Turtle, and 2 pairs of English Turtle Doves, all aviary-bred, and from large out-door aviary; also a splendid cock Hawfinch, in perfect condition, winner, 12s. 6d.—Hamilton Scott, Hamildean, Ipswich.

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The Foreign Bird Club.

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SUBSCRIPTIONS: The Hon. Sec. will be greatly obliged if those who have, up to the present, overlooked their subscriptions (due Jan 1st) will kindly remit same at once.

CLUB MEETINGS: The last of the Winter Meetings will take place on Saturday, April 4th, at the Natural History Museum, Cromwell Road, London S.W.—*Rendezvous*, Entrance Hall at 2.15 p.m.

CLUB DINNER: This will take place on either April 25th or May 2nd, at some central London Restaurant; full particulars in next issue. It is hoped that it will be even more successful than the last, and that those intending to be present will kindly notify Mr. W. T. Rogers (Hon. Secretary, Social Committee), Weald View, Ongar Road, Brentwood, Essex, at once, as this will greatly facilitate the arrangements.

THE MAGAZINE: Copy is much needed on all phases of AVICULTURE, but articles on Cranes, Waterfowl, Game Birds, Doves and Pigeons, and Parrots and Parrakeets, are specially solicited.

WESLEY T. PAGE, *Hon. Editor.*
S. WILLIAMS, *Hon. Bus. Sec. and Treas.*

Illustration and Deficit Fund.

The Committee acknowledge with best thanks the following donations:

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Hewitt, I.	0	10	0
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Mrs. Bainbridge, Elfordleigh, Plymton, Devon. *By S. Williams, F.Z.S.*

Theo. Foster, Fairlight, Babbacombe, Devon.
By the Hon. Editor and J. H. Henstock.

Herbert J Chick, 39a, Radford Road, Nottingham. *By W. H. Raven.*

J. Hudson Earle; Newgate House, Cottingham, Hull.
By Miss M. M. Jackson.

Ernest E. Bentley; St. Mary's Lodge, Louth. *By A. Sutcliffe.*

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Mrs. Pope; Howden, Tiverton, Devon.
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J. Charles, Stone House, Doncaster.
W. E. Steinschen, The Bungalow, Contanchey, Guernsey.
Mrs. D. A. S. Longden, 40, Beechwood Road, Uplands, Swansea.
Mrs. A. L. Tracy; Rossclare, Canford Cliffs, Bournemouth.
Miss M. Boyd, Webbery, Bideford

Changes and Corrections of Address.

Wm. Baxby, to 7, Chesterfield Road, Sheffield.
J. Sumner Marriner, to Cowichan Station, Vancouver Island, B.C.
H. Whistler, to Hissar, Punjab, India.
J. E Rothwell to 153, Sewall Avenue, Brookline, Mass., U.S.A.
D. Dewar, I.C.S., to Saharaupur, U.P., India.
Mrs. R. E. Wethey to Lehden, Coatham, Redcar.

Errata re Roll.

"Mrs. M. Maxwell-Jackson" should read *Miss M. Maxwell-Jackson.*

◆

The Bird Market.

Advertisements must be prepaid and reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny, minimum 4d. Non-Members, three words a penny, minimum 6d.

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MEMBERS' SALES AND WANTS.

WANTED. Hen Australian Crested Dove, in Exchange for Cock; also a cock Red-rumped Parrakeet.—Hamilton Scott, Hamildean, Ipswich.

WANTED. From out-door unheated aviary—3 Hen Cockateels; one Hen Yellow-naped Parrakeet (*Platycercus semitorquatus*); one Hen Bauer's Parrakeet (*Platycercus zonarius*).—Baroness, Cleveland, Minehead.

WANTED: Acclimatised HENS—one Violet-eared Waxbill, three Rufi-caudas, two Gold-breasted Waxbills, and one Indian Grey Tit (*Parus atriceps*).—W. Temple, Ormonde, Datchet, Bucks.

WANTED: Cock Cape Dove; Hen Firefinch; hen Cuba Finch (could give Cock in exchange), and guaranteed Cock Black-cheeked Lovebird. All must be from out-door aviary. FOR SALE: Hen Cutthroat, 3s., Lineolated Parrakeet, 30s.—Capt. Reeve, Leadenham, Lincoln.

FOR SALE: Exhibition Norwich Canaries, at reasonable prices, from 10s. a pair.—Mrs. M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE. Finest strain, magnificent Bandmasters, 10s., cage and carriage free.—Miss Jackson, Cowhill, Rutland Street, Harrogate, Yorks.

FOR SALE. Cock Melba Finch, perfect health and plumage, 17s. 6d. —Miss Wait, 12 Rosary Gardens, London, S.W.

FOR SALE: Rare Cinnamon Lesser Redpoll, 30s.—E. Lamb, "Alverstone," New Malden Surrey.

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WANTED. Pairs of any of the following from out-door aviaries: Green Avadavats; Aurora, Diamond, or Cuba Finches.—Mrs. Read, Church Croft, Weston Park Road, Thames Ditton.

WANTED: A Cock Alario Finch for Mule breeding.—Miss Lucas, 46 Gloucester Square, London, W.

WANTED. Hen Red-headed Gouldian Finch—1913 out-door preferred —must be in perfect condition, exchange ditto cock and cash to value.—Mrs. Christie, Newton, Elgin.

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FOR SALE: Red and Blue Macaw, fine talker, 70s.; Blue-crowned Conure 20s.; Great Vasa Parrot 55s.; Salvin's Amazon 40s.; Indian Mynah 14s.; 1 Cock and 2 Hen Blood-stained Finches, 24s. lot; Cock Mexican Hawfinch 15s.; all fully acclimatised. Mostly very tame.—Dawson-Smith, Nash Rectory, Stony Stratford.

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FOR SALE: Pair Zebra Doves 7s.; Red-billed Weaver 2/6, all been year in aviary,—Mrs. Gott, Weetwood, Leeds.

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Norwich, Yorkshire, and Cinnamon Club Show Cages, all 2s. each, 3 for 5s. 6d.; Border, Crest, Lancashire, Lizard, and Belgian Show Cages, and Bow-fronted Crest Show Cages, 3s. each.

STANDARD BRITISH SHOW CAGES.

Detachable Bow Fronts, Club Colour and Perches.

Size suitable for Redpolls, Siskins, or Twites, 2s. 9d. each; size suitable for Linnets, Goldfinches, Bullfinches, and Greenfinches, 3s.; size suitable for Buntings, Chaffinches, and Bramblefinches, 3s. 3d.; size suitable for Wrens and the Smaller Warblers, 4s. 6d. Size suitable for Nightingales, Blackcaps, etc., 5s. 6d.; size suitable for Thrush, Blackbird, or Starling, 6s. 6d.

Mule or Hybrid Show Cages 2s. 3d., and 2s. 9d. each.

Special Show Cages suitable for any variety of British or Foreign Birds, Made to Order. Kindly state wants.

FOREIGN BIRD SHOW CAGES.

Size 1, suitable for Small Foreign Birds, not larger than Gouldian Finches. Price, 4s. 6d. each. Size 2, suitable for Superb Tanagers or Birds of a similar size. Price, 5s. 6d. each. Size 3, suitable for Shamas, or Birds of a similar size, Price, 7s. 6d. each. Size 4, suitable for Peruvian, Viga, and Blue-headed Jays, or Birds of a similar size, Price, 10s. 6d. each.

Foreign Bird Fanciers Please Note:—We can make Show or Stock Cages suitable for any kind of Foreign Birds if you will kindly write and let us know what you require. We will gladly quote you price.

WOOD TRAVELLING CASE. With Leather Handles and Patent Fasteners. Made light, neat and strong. The following sizes always in stock: To hold 2 Show Cages 5s. each; to hold 3 Show Cages 6s. each; to hold 4 Show Cages 7s. each; to hold 6 Show Cages 8s. each. Special sizes made to order.

CAGE-BIRD EXHIBITION BASKETS. Made of Buffwillow, Varnished and Lined ready for use. Light, neat and strong. The following sizes always in stock: To hold 2 Cages 5s. 6d. each; to hold 3 Cages 7s. each; to hold 4 cages 9s. each; to hold 6 Cages 12s. 6d. each. Special sizes made to order.

ZINC SHOW CAGE DRINKERS WITH HINGED FLAP. Prevents birds washing in drinkers, a boon to exhibitors, price 1s. 6d. doz.; [illegible] post 1s. 9d.

MA[illegible] BIRD SOAP. Specially prepared for washing Birds, Magnet Bird [illegible] produces that most brilliant gloss and finish so much desired in all s[illegible] specimens. Price 7½d. box post free, with coupons for special prizes [illegible] Camel Hair Washing Brushes 1s. each.

WALSH'S LATEST IMPROVED BIRD SPRAYER. This is a Nickel-Silver Sprayer worked with rubber pipe and ball, to fit in ordinary bottle. No blowing required. You can spray the most timid bird with this sprayer without frightening it. A boon to Exhibitors. Price 2s. post free.

For everything connected with the Cage Bird Fancy see our new 100-page catalogue, post free on application.

WALSH, Bird Food Specialist, BLACKBURN.
Telephone 947.

The Foreign Bird Club.

Notices to Members.

THE MAGAZINE: We regret this issue being a few days late, but in consequence of the Easter holidays and the absence from home of the Hon. Editor, the delay has been unavoidable.

COPY: The Hon. Editor urges members to send in notes and accounts of their aviaries and birds, new acquisitions, in fact articles upon all topics of aviculture, as it is impossible to keep the contents of the Club Journal varied and practical unless members prove responsive in this respect. Our desire is to cover the needs of all our large and continually increasing membership, and we look to all to assist us that this may be accomplished.

THE CLUB DINNER: This will take place at the Holborn Restaurant on Thursday, May 21st, at 6-30 p.m. for 6-45 prompt (Dinner 4s., morning dress). Those who have not already intimated their intention of being present, will they please do so at once to W. T. Rogers, Weald View, Ongar Road, Brentwood, Essex. It is sincerely hoped that a good number of members and friends will be present.

WESLEY T. PAGE, *Hon. Editor.*
S. WILLIAMS, *Hon. Bus. Sec. and Treas.*

Post Mortem Reports.

Vide Rules (See Page iii of Cover.)

Goldfinch (♂). (Ernest E. Bentley, Louth). The cause of death was pneumonia.

Cock (not hen) Gouldian Finch. (Capt. John S. Reeves, Lincoln). Cause of death, pneumonia.

Seifert Canary (♂). (Miss Muriel Maxwell Jackson, Harrogate). The bird had extensive pneumonia of both lungs. The panting or quickened breathing is a symptom of the disease.

Green Avadavat (♂), and also the Orange-cheeked Waxbill (♂). (W. O. Montgomery, Hornsea). Died of pneumonia. As a rule pneumonia in birds runs a rapid course, and is usually fatal.

Budgerigar (♀). (Mrs. Susan Rutherford, Edinburgh). Cause of death was peritonitis, due to ruptured ovisac. Did you use force in trying to remove the egg?

Blue Fronted Amazon Parrot (♀). (L. G. Pike, Wareham). The cause of death was enteritis, no doubt due to exposure to a chill. The bird was excessively fat. Chills are fatal to birds.

Cordon Bleu (♂). (J. Weir, New Milton). The cause of death was pneumonia. I don't think lack of food was conducive to its death. Inga seed I have never found harmful to birds.

Paradise Whydah. (Miss Mary Boyd, Bideford). The cause of death was pneumonia, which has been very prevalent during the last few months, in fact, it accounts for the death of the majority of caged birds. The injuriousness of inga seed and egg found is based principally upon error of observation.

Gold-fronted Fruitsucker (♀). (Dr. Amsler, Eton). Died from bird-fever, in which the lesions are chiefly confined to liver and spleen, which are much enlarged and contained innumerable yellowish necrotic foci resembling those of tuberculosis and aspergillosis. Bird-fever runs a much slower course in out-door aviaries than in inside cages. Frequently the lesions are well advanced before symptoms are observed. It is a very destructive disease and highly contagious, mediately and unmediately.

Pekin Robin (♀). (The Hon. M. C. Hawke, Tadcaster). The left lung was badly affected with pneumonia, the right one slightly. Hen Pekin Robins are often passed off as cocks. You should in future have the sex guaranteed.

Budgerigar (♂). (Miss L. Sturton Johnson, Ore). The bird died from pneumonia. Probably the birds you lost last year died from coccidiosis, a parasitic disease chiefly affecting the intestine. This disease attacks every species of bird, chickens, pheasants, partridges, grouse, canaries, etc. It can only be diagnosed by microscopical examination of the fæces or intestinal contents. It is conveyed by the food or water.

Pekin Robin (♂) and Indigo (♂). (The Hon. M. C. Hawke, Tadcaster). Both birds died from pneumonia, which is, in birds at least, more of a climatic than a contagious disease. Bringing birds out of an insanitary dealer's shop and sending them on a long journey by rail, especially during wet chilly weather is enough to set up the malady.

Masked Finch (♀) (Rev. G. H. Raynor, Maldon). The cause of death was bird-fever. Have you lost any more?

Combasou (♂). (Mrs. M. H. Davies, Warrington). The cause of death was pneumonia.

Shama. Col. J. J. Routh, 2, Beechworth Villas, Cheltenham. Your bird must have been ailing some time although you may not have observed anything amiss with it until a few days before its death. This is not a rare experience. The cause of death was pneumonia, but there were also old standing cheesy masses in the left lung, which must have been in existence for a much longer period, perhaps several weeks.

Napoleon Weaver (♀). (Mrs. S. P. Pope, Howden, Tiverton, Devon). The cause of death was cerebral apoplexy.

Hon. Lilla de Yarburgh-Bateson, Heslington. Sorry I have not received your bird. I frequently get from the post office labels without packages

Answered by post: Viscountess Villiers, Mrs. C. H. Wilhams, Mrs. Eccles.

H. GRAY, M.R.C.V.S.

Proposed for Election as Members.

Mrs. M. Alt, 28, Melrose Gardens, Hammersmith, London, W.
By H. Gray, M.R.C.V.S.
F. J. Carr, St. Aidan's, Alnwick. *By J. W. Allan.*
The Comte de Segur, 49, Avenue d' Jena, Paris, France.
By A. Ezra.

W. B. C. Dobson, Bindown, Hampton Wick. *By H. P. Gloyns.*
F. Ditchfield, 37, Nugget Street, Oldham.
Miss Houfton, Mansfield, Notts. *By the Hon. Editor.*
H. T. King, 11, Elm Tree Avenue, West Bridgford, Nottingham.
By J. H. Henstock.

New Members Elected.

J. Marsden, Thornhurst, Tewit Park, Harrogate.
Mrs. Bainbridge, Elfordleigh, Plymton, Devon.
Theo. Foster, Fairlight, Babbacombe, Devon.
Herbert J Chick, 39a, Radford Road, Nottingham.
J. Hudson Earle; Newgate House, Cottingham, Hull.
Ernest E Bentley; St. Mary's Lodge, Louth.

Changes and Corrections of Address.

G. E. Rattigan, to Setley Cottage, Brockenhurst, Hants.

The Bird Market.

Advertisements must be prepaid and reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny, minimum 4d. Non-Members, three words a penny, minimum 6d.

COLOURED PLATES: All the plates that have been issued up to the present, can be obtained uncut for framing at 1/- each, with the exception of "A Beautiful Aviary" which is 1/6.

Apply to The Publisher, Market Place, Ashbourne

MEMBERS' SALES AND WANTS.

WANTED: Pairs of following from outdoor aviary: Zebra Finches, Yellow Budgerigars, Grey Singingfinches, Silverbills, Pennant Parrakeets, Quails:—Fowler Ward, Berners Street, Ipswich.

WANTED: At once, two Zebra Finch hens and one White Java Sparrow hen from outside aviary.—Elms, "Rosebank," Carshalton Road, Sutton, Surrey.

WANTED: Hen Zebra Finch for breeding this season.—Pope, Howden, Tiverton, Devon.

FOR SALE. "Bird Notes" for 1909, 1910, 1911, 1912, and 1913, unbound. Good Condition. Any reasonable offer.—Miss E. M. Foster, 35, High Street, Huntingdon.

FOR SALE: Pennant Parrakeet, 50s.; Great Vasa Parrot, 55s.; Blue-crowned Conure 20s.; tame Indian Mynah 14s.; cock Nonpareil Bunting, full colour, 20s.; cock Longtailed Grassfinch 15s. 6d.; cock White-eared Bulbul, claws missing, 6s. 6d. All above fully acclimatised; outdoors.—Dawson-Smith, Nash Rectory, Stony Stratford, Bucks

WANTED: Pairs Aurora and Zebra Finches; Cocks, Diamond Finch, Green Avadavat, Cordon Bleu, and three Gold-breasted Waxbills. Hens, Bengalese (4), Firefinches (6), Gold-breasted Waxbills (2), Zebra Finches (2). FOR SALE: Cock Indian Cinnamon-breasted Nuthatch, hen Hey's Partridge, hen Jacarini Finch, pair Blue-breasted Waxbills, and Bronze-wing Mannikin.—Page, Glenfield, Graham Avenue, Mitcham, Surrey.

TRAP-FEEDER, as designed by Captain Reeve. M.F.B.C., a permanent Seed Reservoir for feeding birds, which can be utilised as a trap for catching up birds in aviaries at any moment. Can be made to hang on wall indoors if desired. Price £1. Supplied by R. Ellis, Leadenham, Lincoln.

WANTED from outdoor aviary, guaranteed cocks of the following: Cape Dove, Olive Finch, (or sell hen), Black-cheeked Lovebird, Golden-breasted Waxbill, and Paradise Whydah. FOR SALE: Lineolated Parrakeet £1, and hen Pelyelon's Saffron Finches.—Captain Reeve, Leadenham, Lincoln.

WANTED: Cocks. Ribbon Finch. Bengalee. Madagascar Weaver. Paradise Whydah. Also acclimatised Waxbills.—J. H. Henstock, Avian Press, Ashbourne.

FOR SALE Blue and Black Jay (*Xanthura Yucatanica*) imported direct, very rare, £5; Purple Sugarbirds, cocks, 40s.; Yellow-winged Sugarbird, acclimatised hen, 35s.; Montezuma Quail, 30s. pair; Hooded Siskins, finest pair ever imported, 60s.; Melba Finches, acclimatised, 45s. pair; rare Amazon Parrots—Spectacle, 90s.; Double-fronted, 63s.; Mealy, 50s.; Yellow-fronted, 35s.; Cactus Conure, tame, 21s. Large stock of other high-class, rare Parrakeets, Finches, Insectivorous Birds, etc.—John Frostick, 50, Boundaries Road, Balham, S.W.

FOR SALE. Finest strain, magnificent Bandmasters, 10s., cage and carriage free.—Miss Jackson, Cowhill, Rutland Street, Harrogate, Yorks.

FOR SALE: Exhibition Norwich Canaries, at reasonable prices, from 10s. a pair.—Mrs. M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE: Unique Hybrid Mexican Rosefinch × Canary, shows parentage clearly, finely marked cock, excellent songster, out-doors, 10s.—Tomlinson, Inveresk, Midlothian.

WANTED: Uncommon Doves, such as Partridge Bronze-wing, Dwarf, Ruddy-Turtle, Vinaceous Turtle, Mountain Witch, Indian or Australian Green-winged, etc.—Findeisen, Hallow Dene, Torquay.

AVIARIES AND BIRD FOODS: Aviaries Planned and their erection and furnishing supervised at reasonable charges. Aviaries visited and expert advice given. Existing aviaries overhauled, re-arranged, and re-furnished. Supervision of aviaries undertaken by monthly, bi-monthly, or quarterly visits, at terms to be mutually agreed upon. In response to numerous requests I am willing to supply all kinds of Bird Seeds and Foods from my own stock. Also special mixtures for Parrots, Parrakeets, etc., at current rates: INSECTILE MIXTURE, 1s., 1s. 6d., 2s., and 2s. 6d. per lb. NEST BARRELS, for Parrakeets, Lovebirds, etc., specially made for the purpose, in three sizes—small, medium, and large. These barrels, especially the large size, if fitted with a perch or twigy branch, make excellent shelters for birds of the Finch-tribe during inclement weather. Also Rush Nests for Waxbills, and small Finches.—Apply, W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

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Notices to Members.

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THE ILLUSTRATION FUND: There is much need of help to this fund if we are to maintain the present copious illustration of our Journal, and to avail ourselves to the full of photographs and drawings which are sent in.

COPY: This is much needed on all branches of aviculture if we are to maintain varied and comprehensive issues. Articles on Game Birds, Waterfowl and Psittaci specially solicited.

WESLEY T. PAGE, *Hon. Editor.*
S. WILLIAMS, *Hon. Bus. Sec. and Treas.*

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Post Mortem Reports.

Vide Rules (See Page iii of Cover.)

RED-HEADED GOULDIAN FINCH. (♂). (Geo. Scott Freeland, Tonbridge). Cause of death, pneumonia.

BLUE PARRAKEET (♂). (Miss Drummond, Perthshire). Cause of death, aspergillosis of lungs, which contained caseous or cheesy masses, intermingled with spores of *aspergillus fumigatus*. In future, try in such cases, 5 grains of iodide of potassium in drinking water.

ORANGE-CHEEKED WAXBILL (♂). (J. Smith, Kendal). Cause of death, pneumonia.

ROLLER CANARY (♂). (Miss M. Maxwell Jackson, Harrogate). Cause of death, pneumonia. When you find birds puffy and breathing quickly, try keeping them in a continuous high temperature, even up to 100 deg. F.

Answered by post—Miss E. F. Chawner; Miss Margaret Powell.

H. GRAY, M.R.C.V.S.

Illustration and Deficit Funds.

The Committee acknowledge with best thanks the following donations:

	£	s.	d.
Allan, J. W.	0	10	0
Bainbridge, Mrs.	0	7	6
Horsbrugh, Major B. (overpaid sub.)	0	0	9
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Pennant, Lady Edith D.	0	10	0
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Scott, Dr. and Mrs. J. Easton	1	0	0

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Changes and Corrections of Address.

Rogers, W. T., to 21, Priory Villas, New Road, Brentwood, Essex.
H. Botting, to 17, Eversfield Road, Reigate, Surrey.
Lieut. F. M. Littledale, to The Hayes, Cowes, Isle of Wight.

◆

New Members Elected.

Mrs. M. Alt, 28, Melrose Gardens, Hammersmith, London, W.
F. J. Carr, St. Aidan's, Alnwick.
The Comte de Segur, 45, Avenue d' Iena, Paris, France.
W. B. C. Dobson, Bindown, Hampton Wick.
F. Ditchfield, 37, Nugget Street, Oldham.
Miss K. Houfton, Fountain Springs, Mansfield, Notts.
H. T. King, 11, Elm Tree Avenue, West Bridgford, Nottingham.

◆

Proposed for Election as Members.

The Rt. Hon. Lewis Harcourt, P.C., 14, Berkeley Square, London, W. *By Dr. E. Hopkinson, D.S.O.*

B. Steed, 22, North Street, Sudbury, Suffolk. *By C. H. Row.*

D. Mason, The Maisonette, Broadstairs.

Miss Margaret Powell, Hawthorn House, Oakhill Park, Old Swan, Liverpool. *By The Hon. Editor.*

G. E. Low, 14, Royal Terrace East, Kingstown. *By The Lady Dunleath.*

Miss Susan Greenell, The Manor, Carlton Scroop, Grantham. *By B. Hamilton Scott.*

Thos. Parkin, M.A., F.L.S., F.Z.S., M.B.O.U., Fairseat, High Wickham, Hastings. *By H. Whistler, I.P., M.B.O.U.*

W. L. Forster, Smithfield, Orange Free State, South Africa. *By S. Williams.*

Mrs. Sebag-Montefiore, East Cliff Lodge, Ramsgate. *By N. Lucas, M.B., F.Z.S.*

The Show Season.

The following is a list of Medal winners for the past season:

CLAPHAM: Bronze Medal—Mr. A. Ezra.

PORTSMOUTH: Bronze Medal—Miss M. Bousfield.

MANCHESTER: Silver Medal—Mr. R. J. Watts.

CARLISLE: Silver Medal—Mr. F. Howe.

SHEFFIELD: Silver Medal—Messrs. J. W. and W. L. Drabble.

NOTTINGHAM: Silver Medal—Mr. G. Fletcher.

L.C.B.A.: Three Silver Medals—Messrs. Schluter, Maxwell, and Ezra. Three Bronze Medals—Miss A. B. Smyth, Mr. A. Silver, and Lady Pilkington.

BRADFORD: Silver Medal—Lady Pilkington.

LUTON: Silver Medal—Miss M. Bousfield.

GATESHEAD: Bronze Medal—Mr. F. Howe.

EDINBURGH: Silver Medal—Mr. P. Arnott.

For this season Mr. A. Ezra again scores most points for the London Cup.

There seems to be very little competition for the Provincial Cup. Are the provincial exhibitors too nervous to compete against Mr. F. Howe? I notice that at some shows where there are three or more of our members competing, Mr. Howe is the only competitor for the Cup. He wins the new Cup for this year by a very large number of points.

S. M. TOWNSEND,
Hon. Exhibitional Secretary.

3, Swift Street,
Fulham, S.W.

◆

The Bird Market.

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MEMBERS' SALES AND WANTS.

FOR SALE—Cheap. 41 Straight wire punch-bar panels, ½ inch mesh, painted black, to fit a lean-to greenhouse 17 x 12 feet, 10ft. high at back, and 7ft. at eaves. Also 8 wood and wire aviary doors, in good condition—cost over £9, will accept 50s., Would suit any size of green-house.—S. Beaty, Strathnarn, Alderley Edge, Cheshire.

FOR SALE. Acclimatised Shama; splendid songster, perfect health and feather; feed from hand. 40s.—Dr. De Legh, Redcar, Yorks.

FOR SALE. Lesser Double-collared Sunbirds; beautiful pair, in perfect health and plumage; cock in full colour and song. Imported by owner, £4 the pair.—Mrs. Bourke, Hitcham Vale, Taplow, Bucks.

FOR SALE: Finest strain, magnificent Bandmasters, 10s., cage and carriage free.—Miss Jackson, Cowhill, Rutland-road, Harrogate.

FOR SALE: Exhibition Norwich Canaries, at reasonable prices, from 10s. a pair.—Mrs. M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE: Privately Imported Indian species: Gold-fronted Finches (*Metaponia pusilla*), new to aviculture; Rosy-winged Afghan Finch, new to aviculture (1 cock only); Calandra Larks; Crested Black Buntings; Himalayan Linnets (*Acanthis fringillirostris*); Giant Baya Weavers (*Ploceus megarhynchus*); Button and Jungle Bush Quail, etc.—W. T. Page, Glenfield, Graham Avenue, Mitcham, **Surrey.**

FOR SALE. Privately Imported East African species: True pair Jackson's Whydahs, and odd cock; one cock only Crimson-ringed Whydah (*P. laticauda*), Ashy-headed Sparrows, Harlequin Quail, also sundry Weavers and Finches, not yet identified.—W. T. Page, Page, Glenfield, Graham Avenue, Mitcham, Surrey.

WANTED. Cock Red-rump Parrakeet; pair of Green Cardinals; hen Australian Crested Dove, would exchange cock.—B. H. Scott, **Hamildean, Ipswich.**

WANTED: Hens—Red-collared, and Red-shouldered Whydahs; Brown-winged Blue Grosbeak, large Yellow Weavers. Cocks—Moustache Parrakeet, and Cape Sparrows.—Wm. Shore Baily, Boyers House, **Westbury, Wilts.**

WANTED: Pairs of Bourke's, Brown's, Yellow-mantled, or Splendid Rosella Parrakeets; hen Cuban Amazon Parrots, Parrot Finches; hen Purple Sunbird; cock Amethyst-rumped Sunbird, and Indian White-eyes; sell cheap or exchange Senegal Parrots.—Miss L. Clare, 194, Coombe Lane, Wimbledon, S.W.

FOR SALE: Peach-faced Lovebirds, Sydney Waxbills, Magpie Mannikins, Red-crested Cardinals, Red-headed Finches, Black-headed Sibia; cock Melbas, Scarlet Tanagers, Violet Euphonia, Blue Sugar Birds, hen Pectoral, Meyer's Parrot. Particulars on application; list sent free.—James Yealland, Binstead, Isle of Wight.

FOR SALE: Leadbeater Cockatoo, beauty, 70s.; White-winged Parrakeets 70s. pair; Golden-crowned Parrakeets 30s. pair; All-green Parrakeets 30s. pair; Saffron Finches 10s. 6d. pair; Yellow-bellied Finches 25s. pair; Golden Sparrows 12s. 6d. pair; Chingolo Song Sparrows 14s. pair; Scaly-headed Finches 25s. pair. Cocks: Blue-crowned Conure 20s.; Long-tailed Grassfinch, breeder, 15s.; Ruficauda, breeder, 18s.; Bank Mynah 14s.; White-cheeked Lark 5s 6d.; Panama Amazon, talks and mimics, £3 3s.; Vinaceous Amazon 70s. All acclimatised birds; approval.—Dawson-Smith, Nash Rectory, Stony Stratford.

FOR SALE: Cock Golden Pheasant, two years in aviary, any reasonable offer accepted.—R. Cross, Milton House, Northumberland Park, Tottenham, London.

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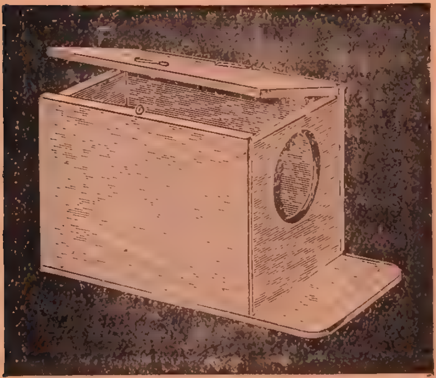

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Notices to Members.

ILLUSTRATION FUND: While thanking those who have contributed so generously to this fund, we urgently need more for this purpose, as illustrations are very costly, but they largely enhance the practical interest of our Journal. If all were to give a little, the support of this important feature of "B.N." would fall a burden upon none (omitting those who have already given), five to ten shillings (or more) per member would make the task of the Editor and Treasurer much more easy and pleasant, and we trust members will suffer this reminder.

CLUB MEETINGS: The first of the summer gatherings will take place at the London Zoo, on Saturday, June 27th, and the next on Thursday, July 16th. *Rendezvous*: Small Birds' House, at 11 to 11-30 a.m., and 2 to 2-30 p.m. on each occasion. It will be of great assistance if those intending to be present will notify Mr. W. T. Rogers, 21 Priory Villas, New Road, Brentwood, as this permits of a little organization.

WESLEY T. PAGE, ***Hon. Editor.***

S. WILLIAMS, ***Hon. Bus. Sec. and Treas.***

New Members Elected.

The Rt. Hon. Lewis Harcourt, P.C., 14, Berkeley Square, London, W.

B. Steed, 22, North Street, Sudbury, Suffolk

D. Mason, The Maisonette, Broadstairs.

Miss Margaret Powell, Hawthorn House, Oakhill Park, Old Swan, Liver-

G. E. Low, 14, Royal Terrace East, Kingstown

Miss Susan Greenall, The Manor, Carlton Scroop, Grantham.

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W. L. Forster, Smithfield, Orange Free State, South Africa.

Mrs. Sebag-Montefiore, East Cliff Lodge, Ramsgate.

Proposed for Election as Members.

J. Vincent Such, Cremyll, North Avenue, Ealing, London, W.
By S. Williams.

C. Chamberlain, The Aviary, 20 Perkin Street, Port Elizabeth, Cape Province, South Africa.
By H. E. Bliss.

Miss M Gerrard, 15, Via Perasto, Lido, Venice, Italy
By the Hon. Editor.

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The Marquis of Tavistock	10	0	0
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The Bird Market.

Advertisements must be prepaid and reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny, minimum 4d. Non-Members, three words a penny, minimum 6d.

COLOURED PLATES: All the plates that have been issued up to the present, can be obtained uncut for framing at 1/- each, with the exception of "A Beautiful Aviary" which is 1/6.
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FOR SALE: Exhibition Norwich, at reasonable prices, from 10s. pair. —Mrs. M. Scholes, Woodcote, Ottery St. Mary.

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FOR SALE: Hen Crimson Finch, also hen Guttural Finch, or offers in exchange, both over twelve months in aviary.—Mrs. Travis, Pedmore Grange, Stourbridge.

FOR SALE: One volume "Foreign Finches in Captivity," by Butler, 60 full page coloured plates by Frohawk, published £1 15s., clean as published for 20s. carriage paid. Also "British Birds with their Nests and Eggs," illustrated by 318 full page plates of Birds and Nests, and 24 coloured plates by Frohawk, 6 volumes, published £5 5s., clean as published for £2 10s. carriage paid.—Address, Mr. Dobbie, 12, Inverleith Gardens, Edinburgh.

FOR SALE: Orange-flanked Parrakeets, faultless pair, out-doors 12 months, 65s.; Golden-crowned Conures 25s. pair; White-winged Parrakeets, 60s. pair; Petz's Conures, 45s. pair. Cocks. Long-tailed Grassfinch, breeder, 12s. 6d.; Red-headed Finch, 6s.; Blue-crowned Conure, 18s. 6d.; White-cheeked Lark, 4s. 6d.—Dawson-Smith, Nash Rectory, Stony Stratford.

FOR SALE: One pair Red-crested Cardinals, from out-door aviary, splendid condition.—Charles, Stone House, Doncaster.

FOR SALE: True pairs, Black-faced Lovebirds, 50s.; Red-faced Lovebirds, 35s.; Californian Quail, very tame, 25s.; Yellow Sparrows, 20s.: Emerald Spotted Doves (*Chalcopelia afra*), 20s.; Sydney Waxbills, 35s.; Red-headed Finches, 12s. 6d. Cocks: Scarlet Tanagers, 20s. each; Queen Whydah, 35s.; Crested Cardinals, 6s. each, Red-crested Touracou £5. Amherst, Swinhoe, and Kalije Pheasants. Approval willingly. Yealland, Binstead, Wight.

FOR SALE: Chinese Dhyal Birds, superb condition, 45s.: Yucatan Blue and Black Jay, very rare, £5; White Blackbird, winner, £5. Yellow-winged Sugarbirds, 30s.; Purple, gem, 50s.; Nightingales, spring caught, 30s.; Blue-throated Warbler, 25s.; Jenny Wren, hand-reared, 21s.; Long-tailed Tits, hand-reared, 10s. 6d.: Virginia Cardinal, perfect health, fine songster, 30s.; Moutezuma Quails, very rare, 35s. pair; Australian King Parrakeet, tame, £8, Red-sided Eclectus, cock, £6; Ceram Eclectus hen, £5; Crimson Lory, cage-moulted, winner, 70s.; Indian Ring-necked Parrakeet, hand-reared, talker, 70s.; Plum-headed Parrakeet, scarce, 50s.; rare Conure, 21s.; Budgerigars, show birds, from 10s. 6d.: ordinary 5s. 6d. pair; Double-fronted Amazon, ex-fine, 70s.: Yellow fronted, tame, 35s.; Australian Finches, acclimatised, and not part of recent consignments, pairs—Gouldian, Pectoral, Rufous-tailed, Yellow-rumped, Chestnut-breasted, 40s.; Long-tailed, Masked, Parson, 35s.; Zebras, 10s. 6d.; African—Melbas, 45s.; Red-headed, 25s.; Firefinches (cage-moulted), 12s. 6d.; Paradise Whydahs, Napoleons, in colour, 10s. 6d.; Hooded Siskins, very fine, 60s.; viewed any time by appointment. Insectivorous Bird's Food, 1s. 10d. lb., free.—John Frostick, 50, Boundaries Road, Balham.

WANTED: Young cock Nonpareil Bunting.—The Hon. Lilla deYarburgh-Bateson, Heslington, York.

WANTED. Hen Diamond Dove, Cock Zebra Finch.—Miss M. Powell, Hawthorn House, Oakhill, Park, Liverpool.

WANTED. Hens; Yellow-shouldered and Red-collared Whydahs. Cocks, Moustache Parrakeet and Cape Sparrow.—Wm. Shore Baily, Boyers House, Westbury, Wilts.

WANTED Cocks, Black-cheeked Lovebird and Gold-breasted Waxbill. FOR SALE: Lineolated Parrakeet; hens Pekin Robin, and Pelzeln's Saffron Finch; pair pure Japanese Pheasants, 50s.—Capt. Reeve, Leadenham House, Lincoln.

WANTED. Cock, Many-coloured, Pennant's and Barnard's Parrakeets or pairs.—Mrs. E. G. Davies, Daresbury Hall, Nr. Warrington.

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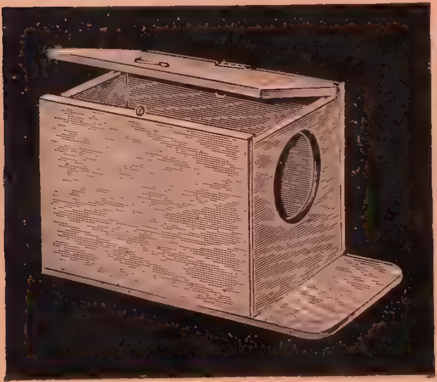

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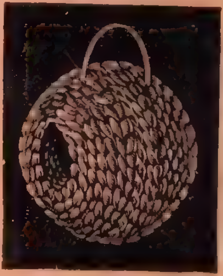

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Notices to Members.

THE MAGAZINE: *Bird Notes* appears in a new dress this month, *i.e.*, in a cover more typical of its character. The Editor thanks the members for their generous response with copy, etc., but the cry is still for more—we want accounts of your breeding successes for this season, and there are many other aviary episodes, not exactly coming under the heading of successes, which would be of great interest if detailed accounts of such were sent in. The Honorary Editor solicits same and will use them as opportunity offers; it will enable us to keep contents of our Journal varied and practical.

THE ILLUSTRATION FUND: The capacious maw of this fund is never satisfied—more is always wanted if this intensely interesting and practical feature of our Journal is to be kept going as at present. We ask your co-operation.

OVERSIGHT: A few members are reminded that their subscriptions for current year are still unpaid. The Honorary Treasurer will be glad to receive same.

SIDNEY WILLIAMS, *Hon. Bus. Sec. and Treas.*
WESLEY T. PAGE, F.Z.S., *Hon. Editor.*

◆

Post Mortem Reports.

The conditions upon which these will be made by Mr. HY. GRAY, M.R.C.V.S, 23, Upper Phillimore Place, Kensington, W., are as follows:

(1) The birds must be sent *immediately* after death.

(2) They *must* be packed in a box.

(3) *The letter accompanying them must* NOT *be placed in the box along with the bird.*

(N.B.—Unless the above conditions are complied with the packages will be destroyed without examination).

(4) The letter must detail *as far as possible* all particulars as to—

(*a*) Date of death.

(*b*) Length of illness.

(*d*) Symptoms of illness.

(*d*) Lodgment and feeding of birds, and

(*e*) Especially as to whether egg food or inga seed has been given.

(5) The work will be done gratuitously, and a report published in "Bird Notes," *but under no circumstances whatever will a report be sent by post unless a fee of* 2s. 6d. *accompanies the letter and bird.* Pressure of work compels Mr. Gray to make this an invariable rule, and it applies to all Members, whether they are personally acquainted with him or not.

◆

BLUE BUNTING and HEN CANARY. (Mrs. E. Travis), Stourbridge Both these birds died from coccidiosis, due to a well known protozoal parasite named *Eimeria avium* or *tenella*. In the Canary the parasite had set up acute haemorrhagic enteritis.

This is a common cause of death of Canaries, Chickens, and young Turkeys, Pheasants, Ducklings, Partridges, Grouse, and other gallinaceous birds, as well as other species kept in confinement or allowed their freedom. This disease, which is very contagious, was first studied and described by the distinguished Italian veterinary pathologist Rivolta some forty years ago. Some authorities in this country seem to think it is a newly discovered disease. Give your birds 1 drachm of tincture of kino to one gallon of drinking water, daily for about a fortnight. and then 20 grains of citrate of ammoniated iron in a gallon of water for about another fortnight. For a fuller account of it refer to Hoare's "System of Veterinary Medicine," Vol. I.

AFRICAN GREY PARROT. (B. Hollins), Harrogate. The cause of death was acute catarrhal pneumonia, which is far from rare in birds after a journey.

COCKATIEL (♀). (F. W. Bull), Sutton, Surrey. Cause of death caseous pneumonia set up by the fungus *Aspergillus fumigatus*.

NONPAREIL BUNTING (♀). (G. E. Haggie), Oxford. Cause of death, pneumonia. This is frequently seen after a journey and often runs a rapid course. The sharp breast-bone is, however, an indication that the bird had been suffering several days.

DOUBLE-COLLARED SUNBIRD (♂). (J. L. Grossmith), Bickley, Kent. The bird no doubt suffered from convulsions which are not rare in such birds. No *post mortem* lesions were discoverable.

HALF-MOON CONURE. (Baronne Le Clément de Taintegines, Cleveland, Minehead). The cock (*not* hen), died from pneumonia.

PORT ADELAIDE PARRAKEET, (Miss Drummond, Errol, N.B.). Cause of death, catarrhal enteritis: no doubt it was present when the bird reached you.

GOLD-FRONTED FINCH (♂). (Miss E. F. Chawner), Forest Bank, Lyndhurst, Hants. Cause of death, pneumonia, no doubt due to change of surroundings, or rather climatic conditions.

BLUE-WINGED LOVEBIRD (♂). (Mrs. Alison Barnaby), Bitterne. Hants. Cause of death, haemorrhage into the lung.

VIOLET TANAGER (♂). (Geo. Scott-Freeland), Tonbridge, Kent. Righ lung entirely caseous, set up by the fungus *Aspergillus fumigatus*.

Answered by Post:—J. H. Anderson; L. G. Pike.

H. GRAY, M.R.C.V.S.

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Crisp, R. L. (over-paid subscription)	0	0	6
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Mrs. Warren-Vernon; to Arrochar House, Arrochar, Dumbartonshire.

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C. Chamberlain, The Aviary, 20 Perkin Street, Port Elizabeth, Cape Provence, South Africa.

Miss M. Gerrard, 15, Via Perasto, Lido, Venice, Italy

Proposed for Election as Members.

Miss Audrey Charlesworth; Marnhull Rectory, Sturminster Newton, Dorset. *By Rev. R. E. P. Gorringe.*
C. F. Leach; Vale Lodge, Leatherhead. *By the Hon. Editor.*
Mrs. Drummond-Chaplin; Marienhof, Johannesberg, South Africa. *By the Hon. Mrs. G. Bourke.*
Mrs. Murray-Smith; 40 Queen Anne's Gate, London, S.W. *By Dr. N. Lucas.*
Miss Clara Bowring; The Holly House, Broadway, Worcestershire. *By S. Williams.*
Mr. Minchin; The Zoo, Adelaide, Australia. *By W. A. Bainbridge.*

The Bird Market.

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FOR SALE: All privately imported, Ashy-headed Sparrow, Speke's Weaver, Large-billed Baya Weaver, Calandra Lark—a single pair of each. Odd Cocks: Jackson's Whydah, Speke's Weaver, Hair-crested Bunting and Baya Weaver. Hens: Jungle, Bush, and Button Quail.—W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

FOR SALE: Exhibition Norwich, at reasonable prices, from 10s. pair. —Mrs. M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE: Pair of Australian Musky Lorikeets in perfect health and feather. Hen Crimson-wing Parrakeet; pair Bauer's Parrakeets; also Black-headed Gouldians, cocks only.—R. Colton, 9, Birkendale Road, Sheffield.

FOR SALE. Diamond Doves, 25s.; Necklace Doves 20s., Zebra Doves 10s., Black-cheeked Lovebirds 35s.; all per pair. Rosella and Alexandrine Parrakeets 20s. each. All bred here this summer.— Wm. Shore Bailey, Boyers House, Westbury, Wilts.

COCKS: Aviary-moulted twice. Short-winged Weavers, 5s. 6d.; Crimson-crowned 8s. 6d.; Red-shouldered Whydah 26s.; Paradise Whydah, 5s., showing colour; one Norwich, and two Yorkshire Canary hens, 6s. the three.—Hon. Secretray, Holland Lodge Edmonton, **London.**

FOR SALE. Orange-flanked Parrakeets, perfect pair, out-doors year, finger tame, 60s.; pair White-winged Parrakeets 50s.; Pair Petz's Conures 35s.; Pair Cactus Conures 25s.; Pair Half-moon Parrakeets 20s.; All-green Parrakeets 16s. pair; Cock Blue-crowned Conure, 15s.; Bank Mynah, 10s.—Dawson-Smith, Nash Rectory, **Stony Stratford.**

FOR SALE. Pair of Pure Japanese Pheasants (*versicolor*). WANTED: guaranteed cock Black-cheeked Lovebird; hens, Quail Finch and Cordon Bleu; also one cock and three hen Gouldian Finches.—**Reeve, Leadenham, Lincoln.**

WINE-COLOUERD Waxbill (*Lagonosticta aenochroa*) new to aviculture 50s.; Australian Finches, pairs, guaranteed acclimatised; Gouldians 50s.; Chestnut-breasted, Yellow-rumped, Long-tailed 40s.; Masked, Parson, 35s.; Zebra, 10s. 6d.; Rufous-tailed cock, Pectoral hen 20s. each; Fire-finches (cage-moulted), 12s. 6d.; Paradise Whydahs, 10s. 6d.; Napoleon, Orange Weavers, 7s. 6d. each; Hooded Siskin, Virginia Cardinal, finest specimens living, 30s. each; Dhyal Birds, Chinese variety, largest and best, 45s. each; Indian Shama, 45s.; Yucaton Blue and Black Jay, very rare, £5; White Blackbird £5; Yellow-winged Sugarbird, gem, 40s.; Australian King Parrakeet, full colour £10; Red-sided Eclectus cock £6. Ceram Eclectus hen £6; Crimson Lory, winner, 70s.; Indian Ring-necked Parrakeet, hand-reared, talker, 70s.; Plum-headed Parrakeet, scarce, 50s.; Aztec Conure, rare, tame, talks, 21s.; Budgerigars, show birds, from 10s. 6d.; ordinary 5s. 6d. pair Double-fronted Amazon 70s.; Hand-reared Jenny Wrens 21s., Long-tailed Tits, 12s. 6d. each; Blue-throated Warbler 25s.; Nightingale 30s.; the champion Dartford Warbler "Perfection," £10 10s.; Special Insectivorous Birds' Food 1s. 10d. lb free.—**John Frostick, 50, Boundaries Road, Balham.**

FOR SALE: Malachite, and Lesser Double-collared Sunbirds £6 6s. per pair, New Holland White-beard, and White-cheeked Honey-eaters, £7 7s. per pair; Lunulated, and White-plumed Honeyeaters, 50s. each. Pair Young Pennant's Parrakeets £4. Diamond Sparrows 25s. pair; St. Helena Waxbills 7s. 6d. pair; Cock Yellow-wing Sugarbird, 1st prize winner, acclimatised, 50s. All personally brought over by advertiser. WANTED: Cocks, Pelzeln's Saffron Finch, Indian Silverbill, and Cherry Finch.—Bainbridge, Hazel**wood, Thorpe, Surrey.**

WANTED: Young cock Nonpareil Bunting.—The Hon. Lilla de Yarburgh-Bateson, Heslington, York.

AVIARIES AND BIRD FOODS: Aviaries Planned and their erection and furnishing supervised at reasonable charges. Aviaries visited and expert advice given. Existing aviaries overhauled, re-arranged, and re-furnished. Supervision of aviaries undertaken by monthly, bi-monthly, or quarterly visits, at terms to be mutually agreed upon. In response to numerous requests I am willing to supply all kinds of Bird Seeds and Foods from my own stock. Also special mixtures for Parrots, Parrakeets, etc., at current rates: INSECTILE MIXTURE, 1s., 1s. 6d., 2s., and 2s. 6d. per lb. NEST BARRELS, for Parrakeets, Lovebirds, etc., specially made for the purpose, in three sizes—small, medium and large. These barrels, especially the large size, if fitted with a perch or twigy branch, make excellent shelters for birds of the Finch-tribe during inclement weather. Also Rush Nests for Waxbills, and small Finches.—Apply, W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

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Cuttlefish Bone, 1s. lb., 3 lbs. 2/6.
Lark Food, 6d. lb, 7 lbs. 3/-
Thrush Food, 6d lb., 7 lbs. 3/-
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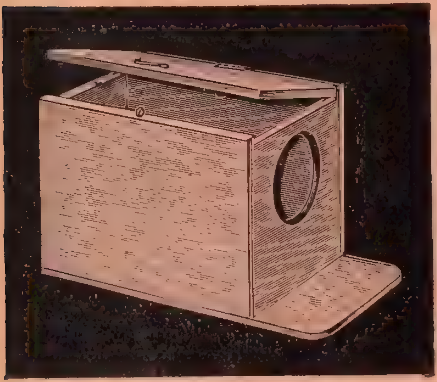

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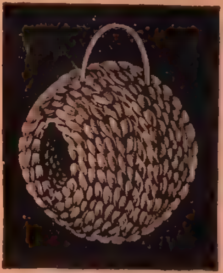

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The Foreign Bird Club.

Notices to Members.

ILLUSTRATION FUND: At this juncture, having reached No. 8 of the present volume, the Editor again asks that all who have not yet contributed will send something—he feels sure that a glance, through the eight parts already issued will convince all that the illustrations are worth the extra cost, moreover, there is another reason why all should help, viz., though this issue is only to part 8, we have practically reached the number of pages that usually comprise the volume. The Hon. Treasurer, Mr. S. Williams, will thankfully acknowledge the smallest contribution. If all take a part the burden will not fall heavy upon any and we shall have a Journal that will command success, and add to the prestige and influence of the Club.

CLUB MEETINGS: In the present unsettled state of affairs we feel that these functions had better be discontinued, but informally the Hon. Editor will be at the Zoo on Wednesdays, August 26th, and September 23rd, and will be pleased to meet any members and officers who can be present. *Rendezvous*: Small Birds' House, at 11-30 a.m. and 2-30 p.m., on each date. He will also be pleased to meet any of the members visiting London at the Zoo, whenever his convenience permits, if a few days' notice be given.

NEW MEMBERS: Again our progress has been good, but it might be much more rapid, if each member would make the Club and its Journal known to all interested in birds. We press this matter upon all, and that is *you*, soliciting your co-operation in increasing the roll.

SIDNEY WILLIAMS, *Hon. Sec. and Treas.*
WESLEY T. PAGE, *Hon. Editor.*

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Illustration and Deficit Funds.

The Committee thankfully acknowledge the following donations:

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Fisher-Rowe, H. M.	0	11	0
Partridge, Mrs	0	5	0

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Changes and Corrections of Address.

P. Arnott; to Grant Street, Alloa.
Miss A. Bruce; to Chevet Park, Wakefield.
H. L. Sich; to Corney House, Burlington Lane, Chiswick, London, W.
Hon. Cynthia Bampfylde, to Whitechapel Manor, South Molton, N. Devon.

New Members Elected.

Miss Audrey Charlesworth; Marnhull Rectory, Sturminster Newton, Dorset.
C. F. Leach; Vale Lodge, Leatherhead.
Mrs. Drummond-Chaplin; Marienhof, Johannesberg, South Africa.
Mrs. Murray-Smith; 40 Queen Anne's Gate, London, S.W.
Miss Clara Bowring; The Holly House, Broadway, Worcestershire.
Mr. Minchin; The Zoo, Adelaide, Australia.

Proposed for Election as Members.

F. Bowerman; 12 Wellington Street, Swindon. *By J. Yealland.*

The Bird Market.

Advertisements must be prepaid and reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny, minimum 4d. Non-Members, three words a penny, minimum 6d.

COLOURED PLATES: All the plates that have been issued up to the present, can be obtained uncut for framing at 1/- each, with the exception of "A Beautiful Aviary" which is 1/6.

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FOR SALE: Exhibition Norwich, at reasonable prices, from 10s. pair. —Mrs. M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE: Pair of acclimatised Macao Amazons, been together for ten years and must never be separated, can be seen by appointment. Suitable for aviary. £10 10s., including cage. *No dealers*.—Miss Pithie, 68, Clarendon-road, Southsea, Portsmouth.

FOR SALE. Hen Stanley Parrakeet, in good condition, two years in unheated out-door aviary, £4.—G. B. Wright, Church Hill, Robert Road, Handsworth, Birmingham.

FOR SALE: 3 strong young Gouldian Finches from Red cock and Black hen, 15s. each; 5 young Long-tailed Grassfinches 10s. each. All bred and reared in open air.—B. Thomasset, Ashmansworth, Newbury.

FOR SALE: Fine pair Black and White Grackles, from M. Pauvvels' collection, 50s.; equally good pair Variegated Laughing-Thrushes, 50s. Pairs: Diamond Doves 25s.; Necklace Doves 15s. Cocks: Abyssinian, and Black Weavers, show condition, 10s. each. Hens: Diuca Finch and Cape Sparrows, 7s. 6d. each. Young Alexandrine Parrot, both parents talkers, 20s.—Wm. Shore Baily, Boyers House, Westbury, Wilts.

FOR SALE: Hen Dhyal Bird, acclimatised, 45s., or near offer.—Miss E. Lucas, Bramblehurst, East Grinstead, Sussex.

FOR SALE: Cuban and Pileated Finches, Gold-breasted Waxbills, Senegal Parrot, four Peach-faced Lovebirds, cock Pekin Robin. Orders taken for paintings of Birds, Dogs, and Horses, from life or photograph; money wanted for War Fund.—Miss Clare, The Hollies, 194, Coombe Lane, Wimbledon.

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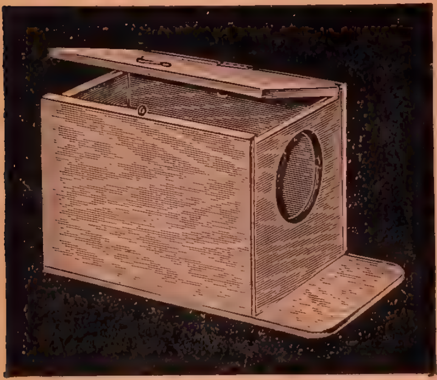

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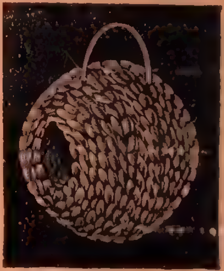

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The Foreign Bird Club.

Notices to Members.

THE MAGAZINE: In the current issue we are pleased to state that general articles have suppressed the Editorial Notes; however, many of these will appear in October issue. The coloured plates are now delivered but did not come to hand in time for this issue. One of them—Parrot Finches—will appear with October issue. Post Mortem Reports appear below—owing to the holiday season, these did not come to hand in time to appear in the Magazine, and have had to be placed at the last moment in the inset.

THE WAR: We do not propose to enlarge upon this unhappy conflict, at this juncture: our members are to be found upon both sides; very many are bearing the brunt of this awful struggle, while others, we expect, have had their homes, etc., devastated in the conflict, *e.g.*, Mons. Pauvvels and E. Godry; Le Comte de Ségur has lost a consignment of Humming Birds through inattention, consequent upon the excitement of hearing of the war on arrival at Havre—but these are after all but insignificant episodes, though real enough to those concerned, in the general horror and devastation, that has so colossally befallen Europe; however, this is not the place to enlarge upon this harrowing picture. The Hon. Editor solicits the help of all, both as to copy for the Magazine, donations to the Illustration Fund, and DEFICIT, etc., that we may quietly go forward till happier times supervene.

CLUB MEDALS: We think the following are entitled to medals for rearing the following species and hybrids for the first time in Great Britain.

SPECIES:—

Cactus Conure (*Conurus cactorum*), Dr. Lovell-Keays.
All Green Parrakeet (*Brotogerys tirica*), Dr. Lovell-Keays.
Dwarf Weaver (*Sitagra luteola*), W. Shore Baily.
Sulphury Seed-eater (*Serinus sulphuratus*), W. Shore Baily.
Sharp-tailed Finch (*Uroloncha acuticauda*), R. Suggitt.
Lesser Grey-headed Guan (*Ortalis vetula*), R. Suggitt.

HYBRIDS:—

Tri-colour Mannikin × Bengalese, W. A. Bainbridge.
Silverbill × Bronze Mannikin, Mrs. M. Boyd.
Greenfinch × Sikhim Siskin, W. Shore Baily.
Red-vented × Red-eared Bulbul, Miss A. B. Smyth.
Grey × White-throated Finch, R. Suggitt.

Some of the accounts of the above successes have already appeared in the Club Journal, the remainder will appear in due course. After being considered by the Awards Committee, the medals awarded will be distributed at the end of the year. In the interim, if any member knows of any previous instance of any of them having been already bred (according to medal rules), will they please send particulars to either of the undermentioned?

CLUB MEETINGS: The Hon. Editor will be at the Zoo on Wednesday, September 23rd, and will be pleased to meet any Member who can attend. *Rendezvous*, Small Birds' House, at 11-30 a.m., and 2-30 p.m.; he regrets that wet weather prevailed on the last occasion.

SIDNEY WILLIAMS, *Hon. Sec. and Treas.*
WESLEY T. PAGE, *Hon. Editor.*

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Post Mortem Reports.

STANLEY PARRAKEET (♂). (La Baronne Le Clement de Taintegnies, Minehead). From the post mortem lesions I am of opinion that death followed convulsions.

HOODED SISKIN. (Geo. Scott Freeland, Tonbridge). The heart and liver were affected with fatty degeneration.

FIRE-TAILED FINCH (♂). (Chas. H. Row, Suffolk). The cause of death was pneumonia.

GREEN AVADAVAT (♂). (W. A. Swayne, Dublin). The cause of death was pneumonia.

MEALY ROSELLA (♂). (J. L. Grosmith, Bickley). Evidently the bird died from heart failure following an attack of convulsions.

RED HIMALAYAN SUN-BIRD. (Geo. Scott Freeland, Tonbridge). The heart and liver were affected with fatty degeneration, probably resulting from a previous disease.

GOLD-BREASTED WAXBILL (♂). (Frank Howe, Wellinborough). The cause of death was pneumonia and enteritis. In future try two drops of Tincture of Kino in the drinking water.

GOULDIAN FINCH (♀). (J. Goodchild, Clare). The bird suffered from "gout." Applying ointment to the feathers evidently hastened her end.

VIOLET TANAGER. (Geo. Scott Freeland). The cause of death was enteritis.

BLUE-HEADED ROCK-THRUSH. (James Yealland, Binstead). The cause of death was enteritis of a chronic type. The sore feet were set up by its anæmic condition.

Answered by post:—William Bush.

HENRY GRAY, M.R.C.V.S.

Sept. 8, 1914.

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The Committee thankfully acknowledge the following donations:

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F. Bowerman ; 12 Wellington Street, Swindon.

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T. N Wilson, to Harrow Lodge, Bransgore, Christchurch.

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FOR SALE : Exhibition Norwich, at reasonable prices, from 10s. pair. —Mrs. M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE : Peach-faced Lovebirds, aviary bred, strong, healthy, young birds, 40s. each. WANTED : Hen Diamond Dove.—Hebb, Brooklea, Downs, Luton, Beds.

FOR SALE : Contents of a small aviary, as owner is moving, as follows : 1 pair Red-headed Finches (5 young in nest), 1 Hen do ; 1 pair Gouldian Finches (building) ; 1 pair each, Waxbills, Cutthroats, and Weavers ; 1 pair Zebra Finches (with 2 young just on wing) ; 1 pair Whydahs (cock in full plumage) ; 1 pair Silverbills (with 2 young on wing) ; 1 pair Bengalese (on eggs) ; 1 Green Singingfinch, mated to Canary (with 1 young hybrid). Odd birds : Orange Weaver, Madagascar Weaver, Nonpareil (cock). All the above are hardy, healthy birds, being out of doors and in perfect feather. The nearest offer to £10 will be accepted for the lot.—Lady Malden, Great Bookham, Surrey.

WANTED: Hens, one of each, Gouldian Finches, Cordon Bleu, and Zebra Finch.—J. Goodchild, Clare.

WANTED: "Bird Notes," Vol. I. (New Series), Nos. 5, 6, 7, 9 and 12.—Shipton, 71, Clondesdale Road, Balham, London, S.W.

FOR SALE: Thoroughly acclimatised and mostly exquisite show condition. Yucatan Blue and Black Jay, £5; Indian Shama, 50s.; Chinese Dhyal Birds, 45s.; Yellow-winged Sugar-birds, 40s.; Blue-throated Warbler, 30s.; Pekin Robin 10s. 6d.; Pairs: Gouldian Finches, 50s.; Chestnut-breasted, Yellow-rumped, Long-tailed, 40s.; Masked, Parson, 35s.; Zebra, 10s. 6d.; Firefinches, 15s. Single. Rufous-tailed, Pectoral, 20s.; Orange, Napoleon Weavers, 7s. 6d.; Montezumé Quails, 35s. pair; Australian King Parrakeet £10; Red-sided Eclectus cock, £6;: Ceram Eclectus hen, £6; Crimson Lory, 70s.; Indian Ring-neck, hand-reared, talker, 70s.; Plum-headed Parrakeet, 50s.; Rosellas, 50s. pair; Aztec Conure, tame, talks, 21s.; Double-fronted Amazon, 70s.; Black-cheeked Lovebirds, 50s. pair; Budgerigars, 10s. 6d. pair. British birds: The champion Dartford Warbler "Perfection," £10 10s.; White Blackbird, £5; Waxwing, 50s.; Nightingale, 40s.; Hand-reared Jenny Wrens, Longtailed Tits, 21s. each. Up-to-date show cages supplied extra.—John Frostick, 59 Boundaries Road, Balham.

FOR SALE: Perfect pair Cactus Conures, from outside aviary, 25s.; cock Mexican Rosefinch, 12s. 6d.—Exchange Foreign Birds.—B. Steed, 22 North Street, Sudbury, Suffolk.

FOR SALE: Cock Peach-faced Lovebird, pair Rosellas, cock Aurora Finch, Pairs: Lavender Finches. Orders wanted for Paintings of Birds, Horses, Dogs, from photographs, proceeds for war fund. Miss Clare, The Hollies, 194, Coombe Lane, Wimbledon, S.W.

AVIARIES AND BIRD FOODS: Aviaries Planned and their erection and furnishing supervised at reasonable charges. Aviaries visited and expert advice given. Existing aviaries overhauled, re-arranged, and re-furnished. Supervision of aviaries undertaken by monthly, bi-monthly, or quarterly visits, at terms to be mutually agreed upon. In response to numerous requests I am willing to supply all kinds of Bird Seeds and Foods from my own stock. Also special mixtures for Parrots, Parrakeets, etc., at current rates: INSECTILE MIXTURE, 1s., 1s. 6d., 2s., and 2s. 6d. per lb. NEST BARRELS, for Parrakeets, Lovebirds, etc., specially made for the purpose, in three sizes—small, medium and large. These barrels, especially the large size, if fitted with a perch or twigy branch, make excellent shelters for birds of the Finch-tribe during inclement weather. Also Rush Nests for Waxbills, and small Finches.—Apply, W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

The Foreign Bird Club.

Notices to Members.

THE MAGAZINE: Again we are pleased to state that press of copy has excluded Editorial and other notes; but the season's nesting notes, etc., will be brought up to date in November issue. At the same time members must not conclude that we have too much copy! It is essential that there should always be a good supply of copy in hand, so that choice is always possible, and in the respective issues neither the purely avicultural, nor the purely ornithological unduly prevail. Our coloured frontispiece this month is not of the usual type, but, we hope, none the less practical and interesting. The accompanying notes are merely a cursory review of the genus Erythrura: the species known to aviculture will be dealt with in November and following issues, and that the result may be a comprehensive one, the Hon. Editor solicits notes from those members who have kept any of the following species:

Common Parrot Finch (*Erythrura psittacea*).
Pintail Parrot Finch (*E. prasina*).
Three-coloured Parrot Finch (*E. trichroa*).
Peale's Parrot Finch (*E. pealii*).

He hopes that many will respond and that not merely breeding successes will be recorded, but also partial successes, disasters, general treatment and conditions under which the birds were kept will be fully given, then there should be some practical result therefrom. If this series runs into next volume so much the better, as there is plenty of scope, especially as the Pin-tailed Parrot Finch (Pin-tailed Nonpareil) is one of the best known species and largely kept, and we hope very many of our members, including those of the Medical and Veterinary professions, will respond.

ILLUSTRATION AND DEFICIT FUNDS: We make no apology for keeping these funds before our Member, even in these critical times, for the need is the greater, and very soon, we fear, even with curtailment, cost of production will go up, therefore we feel assured that every member who can will send something—such responses at the present time will prove very gratifying and helpful to our Honorary Treasurer as this period is always a trying one, but more especially so, in the present critical times.

Election of Council: The following (Dr. J. Easton Scott, Dr. Hetley, and W. T. Rogers) retire by seniority on December 31st next, but are eligible for re-election. Nomination of Candidates or Volunteers, must be sent in, so as to reach either of the undersigned, by October 31st, as in the case of an election, voting papers will be distributed with our next issue.

SIDNEY WILLIAMS, *Hon. Sec. and Treas.*
WESLEY T. PAGE, *Hon. Editor.*

◆

The Show Season.

THE AUTUMN SHOW AT THE HORTICULTURAL HALL.

The L.C.B.A. have pluckily decided to hold their Show as usual, and as all profits are to go to the British Red Cross Society, the committee hope that Members, whether Exhibitors or not will support this effort very strongly.

The classification given, although not so extensive as was intended, is still very good and equal to last years, 31 classes in all. It is to the exhibitor's advantage that this large classification should be given, as it ensures fairer competition for certain birds, so it is hoped that all members will send at least one entry, or, if they cannot will support the Show by visiting it.

S. M. TOWNSEND.
Hon. Exhibitional Sec.

3, Swift Street,
Fulham, S.W.

◆

Changes and Corrections of Address.

Rev. J. M. Paterson to, Karachi, Sindh, India.
Mrs. E. A. Hartley to, Lynchfield, Bishop's Lydeard, Taunton.
W. A. Bainbridge to, *at* The Hermitage, Monkton-Combe, Bath.
H. Gourlay to, Penshurst, Shortheath, Farnham, Surrey.
W. J. Hentsch, Lockington, Malden Road Malden, Surrey.

Illustration and Deficit Funds.

The Committee thankfully acknowledge the following donations:

	£	s.	d.
Cartwright, Mrs. E.	0	5	0
Chawner, Miss E. F.	0	10	0
Croysdale, Mrs.	0	10	0
Dunleath, Lady	1	0	0
Hawke, Hon. Mary C.	1	0	0
Johnson, Miss Sturton	0	10	0
Mitchell, H.	1	0	0
Morgan, Mrs.	0	3	0
Mundy, Miss S.	0	10	0
Pike, L. G.	0	10	0
Tomlinson, M. R.	0	5	0

◆

The Bird Market.

Advertisements must be prepaid and reach the Editorial Secretary by the 10th of the month. Charge: Members' advertisements, four words a penny, minimum 4d Non-Members, three words a penny, minimum 6d.

COLOURED PLATES: All the plates that have been issued up to the present, can be obtained uncut for framing at 1/- each, with the exception of "A Beautiful Aviary" which is 1/6.

Apply to The PUBLISHER, Market Place, Ashbourne

MEMBERS' SALES AND WANTS.

FOR SALE. Finest Strains. Magnificent Bandmasters, 10s., cages and carriage free.—Miss Jackson, Cowhill, Rutland Road, Harrogate, Yorks.

FOR SALE: Exhibition Norwich, at reasonable prices, from 10s. pair. —Mrs M. Scholes, Woodcote, Ottery St. Mary.

FOR SALE: All privately imported and now acclimatised, Swainson's Sparrows, 60s pair; Purple Sunbird, 62s pair, Calandra Lark (*Melanocorypha bimaculata*), 50s. pair; cock Jackson's Whydah 63s., cock E. Af. Masked Weaver, 25s.; Hens, Jungle Bush-Quail.—W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

FOR SALE: Paris Bronze-wing Doves 40s., Aurita Doves 20s., Diamond Doves 20s., Necklace Doves 15s.; also very fine pair Rosella 30s., will exchange for Ornamental Waterfowl.
Shore Baily, Boyers House, Westbury, Wilts.

FOR SALE Pair Moustache Parrakeets 20s.; 20 pairs Budgerigars, 4s. per pair; 2 cock Cockateels, 5s. each; all in perfect condition and bred in outside aviary, and not suitable to be cooped up in small cages.—H., 192, Worple Road, Wimbledon, London, S.W.

FOR SALE: Cock Splendid Rosella and Hen Common Rosella; pairs Pileated, and Lavender Finches; cocks Cuban and Aurora Finches.—Miss Clare, 194 Coombe Lane, Wimbledon, London, S.W.

FORU 1914 aviary reared Golden Pheasants, 3 cocks, 1 hen. Two Australian Peaceful Doves, believed to be a pair.—B. Branfoot, 41, Cromwell-road, Grimsby.

ZEBRA FINCHES (Outdoor Aviary bred), cocks 3s. 6d., hens 5s. 6d. Strong and hardy.—J. H. Henstock, Avian Press, Ashbourne, Derbyshire.

PET SPOONBILL, feeds from hand. 40s.; Hahn's Macaw, £6 10s.; Blue-crowned Conure 20s.; Orange-flanked Parrakeets, 60s. pair; All-green Parrakeets, 12s. pair; White-winged Parrakeets 45s. pair; Violaceous Hangnest, cock (*Dives atroviolaceus*) 15s.; Brazilian [illegible] 25s. Dawson-Smith, Nash Rectory, Stony Stratford.

PAIRS V[illegible] Cardinal's 70s; Parrot Finches (bred this and last [illegible]), with young Cock, paired lately with Hen Cuban, £8; C[illegible] 10s. Cocks: Seedeaters 6s. 6d., Canaries 7s. 6d. Rattigan, Settley Cottage, Brockenhurst.

FOR SALE: 1 cock Virginian Cardinal, 17s.; 1 Brazilian Hangnest, 16s.; 4 Crested Cardinals (one with one stiff toe), 26s., lot; 2 cock Californian Quail, 7s. each; 1 cock Cape Canary, 7s. 6d.; 2 Quaker Parrakeets, 8s. 6d. each. First two acclimatised, rest privately imported, but recent arrivals.—Low, 14 Royal Terrace, E., Kingstown, Ireland.

AVIARIES AND BIRD FOODS: Aviaries Planned and their erection and furnishing supervised at reasonable charges. Aviaries visited and expert advice given. Existing aviaries overhauled, re-arranged, and re-furnished. Supervision of aviaries undertaken by monthly, bi-monthly, or quarterly visits, at terms to be mutually agreed upon. In response to numerous requests I am willing to supply all kinds of Bird Seeds and Foods from my own stock. Also special mixtures for Parrots, Parrakeets, etc., at current rates: INSECTILE MIXTURE, 1s., 1s. 6d., 2s., and 2s. 6d. per lb. NEST BARRELS, for Parrakeets, Lovebirds, etc., specially made for the purpose, in three sizes—small, medium and large. These barrels, especially the large size, if fitted with a perch or twigy branch, make excellent shelters for birds of the Finch-tribe during inclement weather. Also Rush Nests for Waxbills, and small Finches.—Apply, W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

NOVEMBER, 1914.

The Foreign Bird Club.

Notices to Members.

IMPORTANT.—Doubtless many of our members have, or will be "Joining the Colours" during the progress of this terrible European War—we should much like to keep a list of such and shall be grateful if members will send in their names on enlistment; also we much desire to publish a "Roll of Honour" of those who fall in the conflict, if members will keep us posted. Those who stay at home can help by obtaining details as above and keeping us informed as to any of our members who enlist, and of any casualties among them.

The Hon. Mrs. Bourke kindly offers a temporary home for the birds of those who JOIN THE COLOURS (or others called to duties away from home owing to the war, though not to the fighting front), to the full extent of her accommodation, so long as the war lasts. This applies to all Cage and Aviary Birds, Parrot tribe alone excepted. The birds will be fed and looked after by a skilled attendant, free of charge. Application may be made to her direct (75 Gloucester Place, Portman Square, London, W.) or per the Hon. Editor.

THE COUNCIL: No nominations having been sent in, the retiring members, Dr. J. Easton Scott, Dr. Hetley, and Mr. W. T. Rogers are duly re-elected. The Council have agreed to a request of the Hon Editor, to increase their numbers by four, so that he may have extra assistance during what is likely to be a trying period, and the following have kindly consented to serve if elected, viz.:

Dr. L. Lovell-Keays, Mr. Herbert Bright, Dr. M. Amsler, and the Hon. Mrs. G. Bourke.

If there are no further nominations, the election of the above follows as a matter of course.

ILLUSTRATION AND DEFICIT FUNDS: We are not repeating this notice but refer members to last month's issue (pink pages 71-2).

WESLEY T. PAGE, *Hon. Editor.*
SIDNEY WILLIAMS, *Hon. Sec. and Treas.*

The Show Season.

The Show Committee have granted our patronage to the following Shows:

Members are reminded that they must put F.B.C. after each entry, and the word "Cup" after each of the three birds they wish to nominate for the competition.

THE L.C.B.A. SHOW, HORTICULTURAL HALL, WESTMINSTER, November 26th, 27th, and 28th. Classification for thirty-one classes for Foreign Birds. Three Silver and three Bronze Medals and the London Silver Cup for competition. Judges: Messrs. H. D. Astley and D Seth-Smith. Schedules from Mr. J. Knight, 64 Chaplin Road, Wembley, Middlesex.

EDINBURGH. THE SCOTTISH NATIONAL SHOW, December 31st, and January 1st. Classification for six classes for Foreign Birds. One Silver Medal and the Provincial Silver Cup for competition. Judge, Mr. C. Sykes. Schedules from Mr. J. R. Meikle, 22 Brougham Street, Edinburgh.

I must beg all members to support the L.C.B.A. Show this month, firstly by sending a good entry and secondly by visiting the Show, as all profits will go to the British Red Cross Fund.

S. M. TOWNSEND.
Hon. Exhibitional Sec.

3 Swift Street,
Fulham, S.W.

◆

Illustration and Deficit Funds.

The Committee thankfully acknowledge the following donations:

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Anderson, J. H.	0	10	0
Baker, Miss	0	5	0
Drummond, Miss	0	5	0
Knobel, Miss	0	2	6
Lucas, Dr. N.	0	10	0
Paterson, Rev. J.	0	10	0
Perreau, Major G. A.	0	10	0
Sproston, Mrs. (overpaid subscription)	0	0	6
Sutcliffe, A.	0	11	0

◆

Changes and Corrections of Address.

Mrs. G. L. Roberts, to 132, Queen's Road, Bayswater, London, W.

Mrs. Drummond Chaplin, to Government House, Salisbury, Rhodesia, Africa.

Dr. E. Hopkinson, to South Bank, Bathurst, Gambia, West Africa.

Proposed for Election as Members.

Miss M. E. Southey ; The Vicarage, Chiddingly, Halland, Sussex.
By Dr. L. Lovell-Keays.

Mrs. Paget Steavenson, Cross Bank Hill, Hurworth-on-Tees, Darlington.
By the Hon. Editor.

Mrs. H. G. Baker, Brookfield House, Swinton, Yorks.
By S. Williams.

◆

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FOR SALE: All privately imported and now acclimatised, Swainson's Sparrows, 60s. pair ; Purple Sunbird, 63s. pair ; Calandra Lark (*Melanocorypha bimaculata* 50s. pair ; cock E. Af. Masked Weaver, 25s. Hens, Jungle Bush-Quail.—W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

FOR SALE. Hens, Diamond and Brush Bronze-wing, 20s. each, Half-collared and Senegal Doves, 7s. 6d. each, Cape Sparrow, 7s. 6d. Cocks Diuca Finch 10s., Euler's Finch 12s. 6d., Olive Finch 7s. 6d., Cuban Finch 7s. 6d., Rufous-necked Weaver, 7s. 6d., Abyssinian and Yellow-shouldered Weavers, 10s. each ; Blossom-headed Parrakeet, 12s. 6d. All still outdoors.—W. Shore Baily, Boyers House, Westbury, Wilts.

FOR SALE. Two perfect, acclimatised, cock Crimson-wing Parrakeets, wing Parrakeets, living tgoether in small unheated aviary through the winter, one a breeder; tame and perfect in every way. South American Hawfinch (*Mycerobas melanoxanthus*), handsome black and yellow bird, tame, acclimatised, 70s., cheap. Three Black-cheeked Lovebirds, just out of nest £2. Cuban Red-legged Thrush, show condition, 35s.; White-headed Black-bird, 15s., cost 25s.—Hon M. C. Hawke, Wighill, Tadcaster.

WANTED: Hen Adelaide Parrakeet.—Miss Drummond, Mains of Megginch, Errol, Perthshire.

FOR SALE. Cocks, Golden Pheasants 20s. each; Californian Quail 10s. each; Pine Grosbeaks (feed from hand) 15s.—Sutcliffe, Fairholme, Grimsby.

FOR SALE: Red-collared Lorikeets, perfect pair, outdoors months, £4; Leadbeater Cockatoo, talks, tame, 60s.; Orange-flanked Parrakeets, faultless, finger tame, 60s. pair; All-Green Parrakeets 10s. pair; cock Blue-crowned Conure 17s. 6d.; cock Olivaceous Hangnest (*Dives atroviolaceus*), rare, 15s.; Patagonian Cinnamon Falcon (*Cerchneis cinnamomina*), 25s.—Dawson-Smith, Nash Rectory, Stony Stratford, Bucks.

FOR SALE. Cock Splendid Rosella Parrakeet; pair Pileated Finches; cocks Cuban and Aurora Finches; pair Lavender Finches. Would exchange cock Violet-eared Waxbill for hen same species. Young Italian Greyhounds. Apply "Aviculturist," c/o Hon. Editor, Glenfield, Graham Avenue, Mitcham, Surrey.

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The Foreign Bird Club.

Notices to Members.

THE COUNCIL. No others having been nominated, the following: Dr. L. Lovell-Keays, Dr. M. Amsler, Mr. Herbert Bright, and the Hon. Mrs. G. Bourke, have been duly elected thereto in accordance with the rules.

THE MAGAZINE. The present issue completes another volume, and, while thanking all who have contributed to such an interesting and bulky volume, the committee hope, that not only will past contributors continue their kind help in the next volume, but, that many of our members who have not hitherto written anything for the Magazine, will send in accounts of their aviaries and birds or articles upon any and every topic of aviculture.

SIDNEY WILLIAMS, *Hon. Sec. and Treas.*
WESLEY T. PAGE, *Hon. Editor.*

Illustration and Deficit Funds.

The Committee thankfully acknowledge the following donations:

	£	s.	d.
A Member	5	0	0
Brook, E. J.	20	0	0
Lucas, Miss	0	5	0
Marmont, W. B....	0	5	0
Quincey, R. de Q.	5	0	0
Reeve, Captain J. S.	0	10	0
Valentine, E....	0	10	0
Whistler, H.	0	10	0
Winchelsea and Nottingham, The Countess of	1	1	0

Changes and Corrections of Address.

E. A. Mallett, to Great Wishford, Salisbury.
W. A. Bainbridge, to Hazelwood, Thorpe, Surrey.
R. E. Simpson, to 5, Christ Church Avenue, Armley, Leeds.
Lady Webster, to Powdermill House, Battle, Sussex.
G. W. F. Lythgoe, to Camlyn, Cromwell Road, Stretford, Manchester.
Rev. J. A. Lovell Beazor, to The Nest, Bicclescombe Park, Ilfracombe.
E. Hopkinson, D.S.O., M.A., M.B., to Bathurst, Gambia, West Africa.
Miss F. M. Wilson, to 35, Emanuel Avenue, Acton, Middlesex.
Chas. Isaac, to Brockley House, Slough.
E. W. Harper, to 6, Ashburnham Road, Bedford.
H. Gourlay, to c/o Mrs. Forester, Pinehurst, Shortheath, Farnham, Surrey.

Proposed for Election as Members.

W. G. Percival, Nanga, Chania Bridge, British East Africa.
By the Hon. Editor.
A. E. Stott, 15, East Parade, Leeds. *By J. H. Henstock.*
Edward Grevile Herbert, Bombay Burmah Trading Co., Bangkok, Siam, and The Rectory, Hemingford Abbot, St. Ives, Hunts.
By R. A. Holden.
W. G. Clark, Hummers Knott, Windsor Road, Slough. *By E. A. Strickland.*

New Members Elected.

Miss M. E. Southey; The Vicarage, Chiddingly, Halland, Sussex.
Mrs. Paget Steavenson, Cross Bank Hill, Hurworth-on-Tees, Darlington.
Mrs. H. G. Baker, Brookfield House, Swinton, Yorks.

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COCK Violet-eared Waxbill, sell or exchange for hen. Cock Ruficauda Finch: cocks Aurora and Cuban Finches. Young, champion bred, Italian Greyhounds, colour peach-fawn.—Miss Clare, The Hollies, 194, Coombe Lane, Wimbledon.

AUSTRALIAN Birds for Sale, all acclimatised, Parrot-Finches, Plum-head (Cherry) Finches, Bicheno's Finches, Sydney Waxbills, in pairs. Also a Musky Lorikeet and a Yellow-mantled Parrakeet.—R. Colton 9, Birkendale Road, Sheffield.

FOR SALE: "Bird Notes," Vols. IV. and V., in parts, 20s. or offer.—F. M. Littledale, The Hayes, Cowes.

WANTED to Exchange: pairs of Himalayan Snow Pigeons, rare Rufous Pigeons, Indian Necklace Doves, and Australian Crested Pigeons, for such as Passerine, Rosella, or Pennant's Parrakeets.—A. G. Findeisen, Hallow Dene, Torquay.

FOR SALE: Indian Calandra Larks (*Melanocorypha bimaculata*), one pair only.—W. T. Page, Glenfield, Graham Avenue, Mitcham, Surrey.

PUBLISHED ABOUT THE 15th OF EACH MONTH]

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THE PRICE OF THIS ISSUE IS 1s. 6d.

ANNUAL SUBSCRIPTION TO NON-MEMBERS, 15s. 0d.

New Series

Vol. V. No 1.

BIRD NOTES

THE JOURNAL OF THE FOREIGN BIRD CLUB.

Edited by WESLEY T. PAGE, F.Z.S.

JANUARY, 1914.

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Post Mortem Reports

ASHBOURNE
Printed and Published by J. H. HENSTOCK, Avian Press

MEMORANDA FOR MEMERS.

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A New Volume commences every January.

All Subscriptions should be sent to the Hon. Treasurer, SIDNEY WILLIAMS, F.Z.S., Holland Lodge, Edmonton, London, N.

All dead birds for *post mortem* examinations should be sent to H. GRAY, M.R.C.V.S., 23, Upper Phillimore Place, London, W.

All MSS. for publication in *Bird Notes*, and Books for Review, Proposals for New Members, Advertisements for "The Bird Market," and claims for Breeding Medals should be sent to the Hon. Editor, W. T. PAGE, Glenfield, Graham Avenue, Mitcham, Surrey.

All enquiries as to the treatment of Birds should be sent to the following gentlemen: Parrots and Parrakeets, H. T. T. Camps, F.Z.S., Linden House, Haddenham, Isle of Ely; Insectivorous, Frugivorous, and Small Seed eating Birds, W. T. Page, F.Z.S., Glenfield, Graham Avenue, Mitcham, Surrey.

*** *All letters referring to the above or identification of birds must contain a penny stamp for reply.*

All applications for Show Medals and enquiries re Shows should be sent to Mr. S. M. TOWNSEND, 3, Swift Street, Fulham, London S.W.

All other correspondence, changes of address, etc., should be sent to the Hon. Business Secretary, SIDNEY WILLIAMS, F.Z.S., Holland Lodge, Edmonton, London, N.

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All correspondence, MSS., etc., (also remittances) relating to TRADE ADVERTISEMENTS should be sent to the publisher, J. H. HENSTOCK, who will quote rates and transact all business connected therewith. Also all complaints re non-delivery of the Magazine.

An Illustration Fund is kept open for the purpose of increasing the number of plates, other than the regular income of the Club provides for. The smallest donation will be thankfully received for this object by the Hon. Treasurer.

All members not receiving their copies of *Bird Notes* by the 20th of each month should *at once* write the Publisher complaining of the omission.

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PUBLISHED ABOUT THE 15th OF EACH MONTH.

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New Series

Vol. V. No 2.

BIRD NOTES

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Edited by WESLEY T. PAGE, F.Z.S.

FEBRUARY, 1914.

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The Birds on Buena Vista Lake, Southern California … By Wm. Shore-Baily.

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BIRD NOTES

THE JOURNAL OF THE FOREIGN BIRD CLUB.

Edited by **WESLEY T. PAGE, F.Z.S.**

MARCH, 1914.

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MEMBERS' MEETINGS.

The first of these for this season will take place at the London Zoo, on *Saturday, June* 27th, and the second on *Thursday, July* 16th. (Others will be announced in due course). *Rendezvous*: SMALL BIRDS' HOUSE, at 11 to 11-30 a.m., and 2 to 2-30 p.m. on each occasion. It will facilitate arrangements if those intending to be present will notify Mr. W. T. ROGERS, 21 Priory Villas, New Road, Brentwood.

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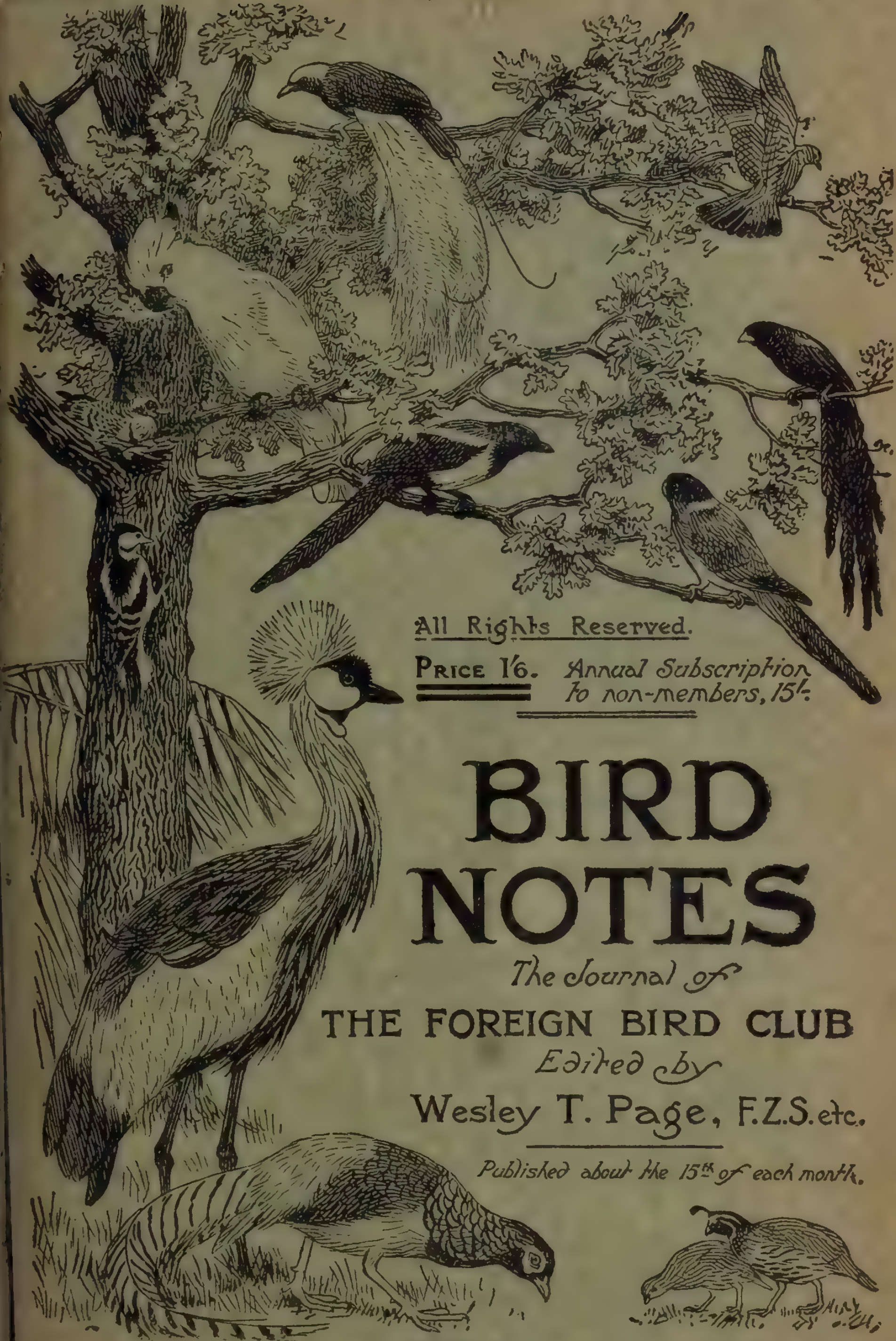

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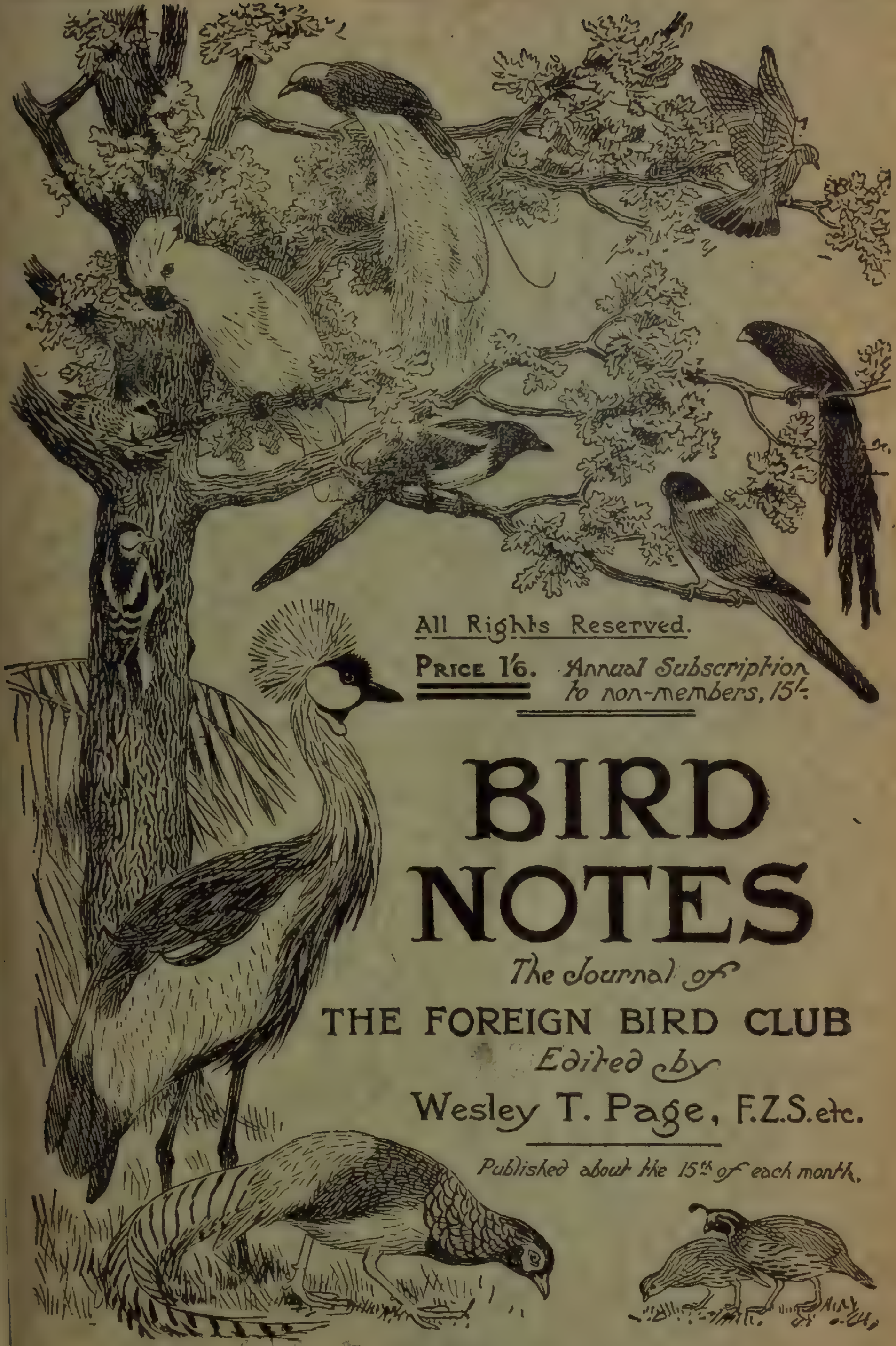

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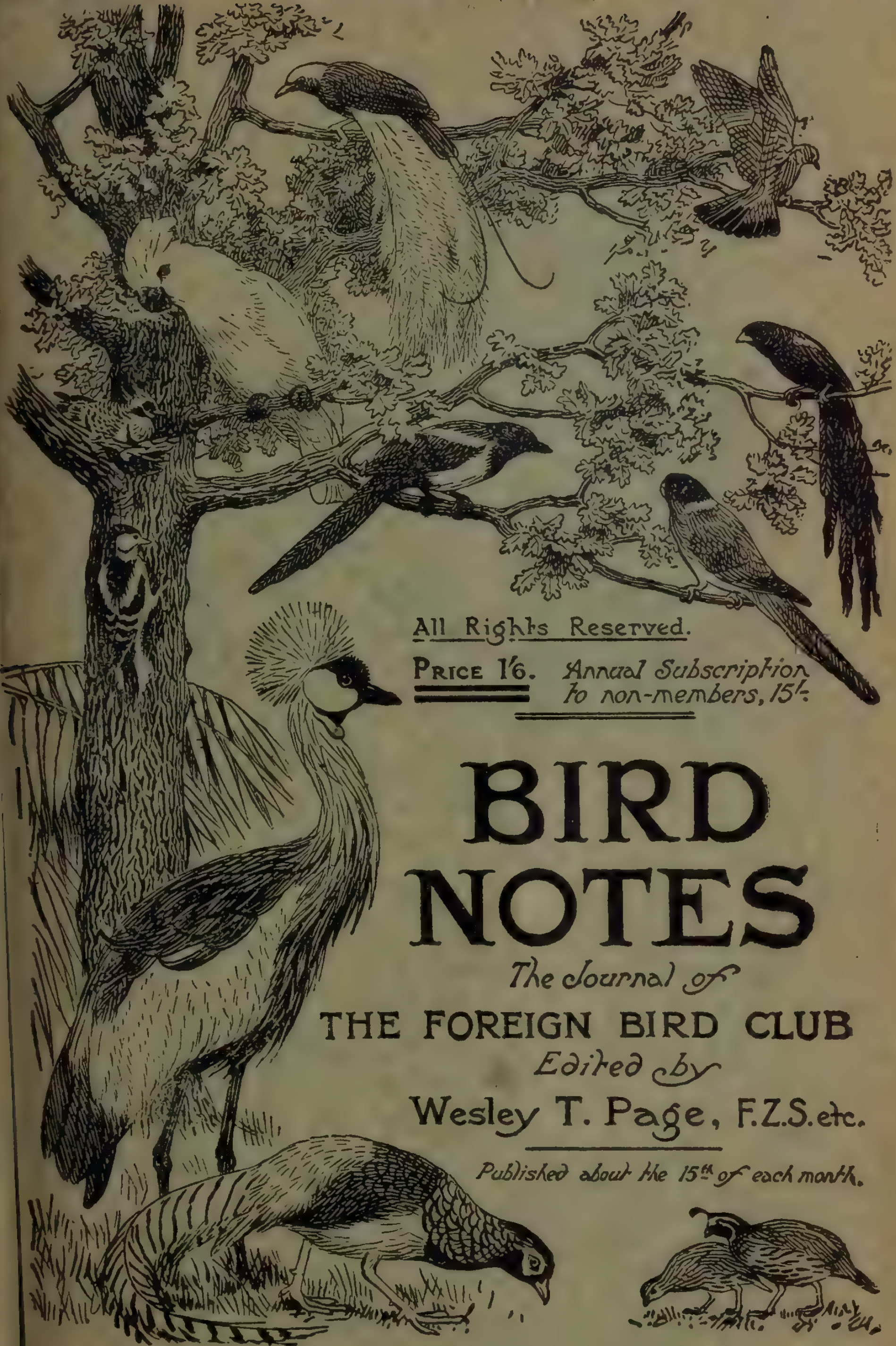

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(*a*) Date of death.

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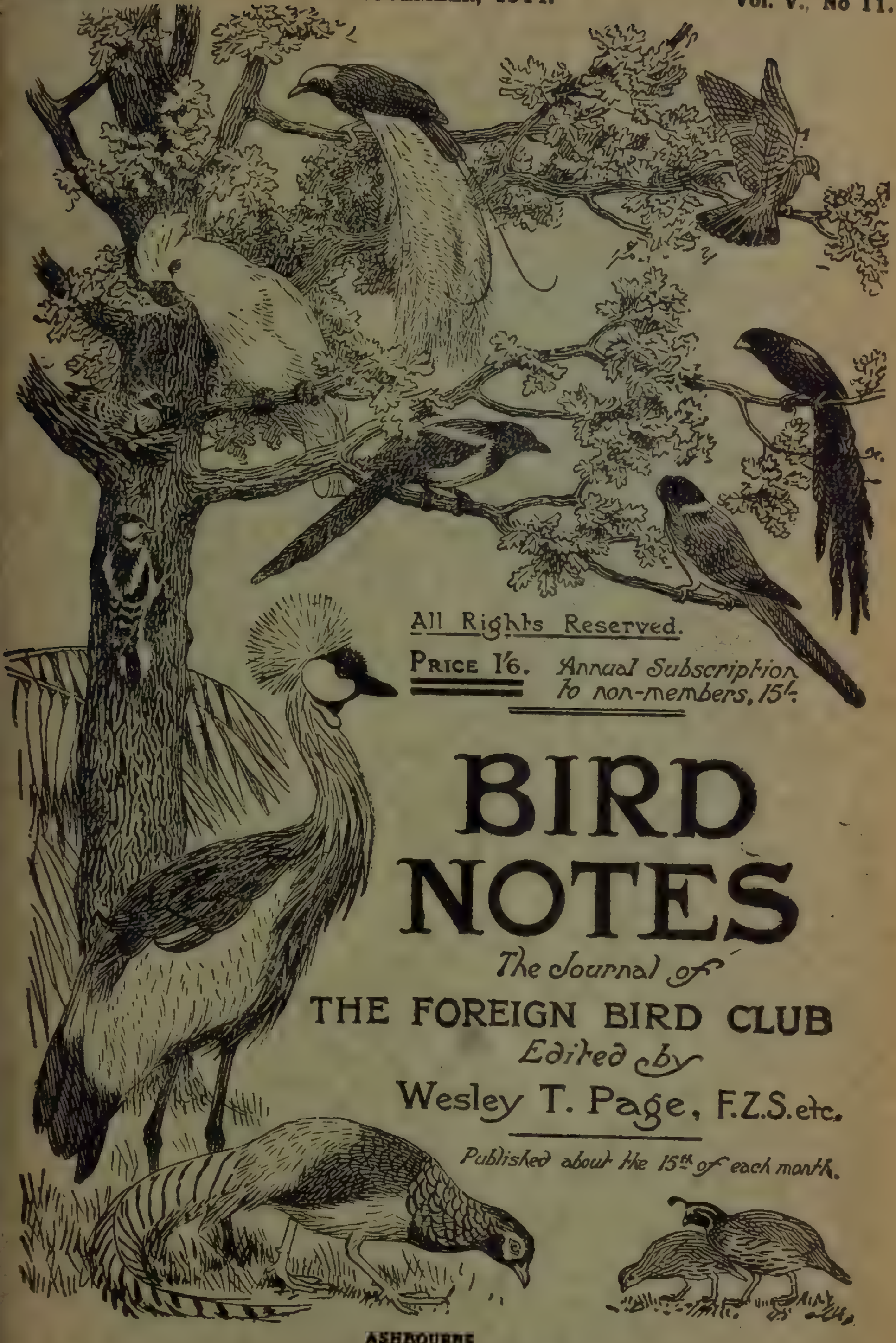

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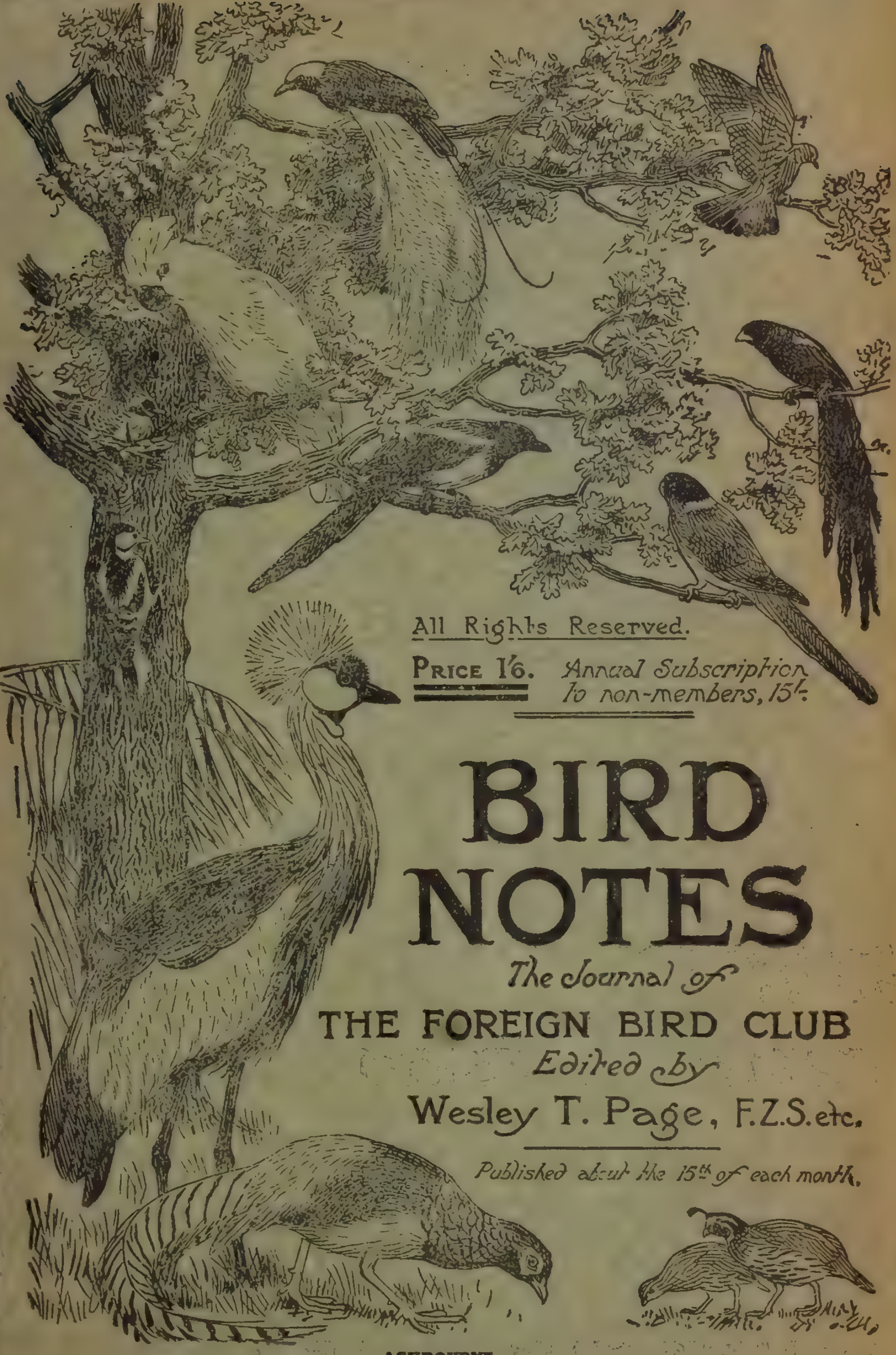

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